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CANADIAN Social Trends

FEATURES

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Home heating

Older children at home

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Parents with adult children living at home

by Martin Turcotte



Parents playing host to their adult children has become a more common living arrangement in recent years. Media, television and movies often portray this situation, depicting the difficulties that many parents have telling their kids that they should leave the nest. In many of these scenarios, the picture drawn is one of frustrated parents enduring a situation they had neither planned nor prepared for.

As is often the case, part of the popular view about adult children living at home is probably not without foundation. Some parents might feel trapped in an unwanted living arrangement, in which their adult children take advantage of their hospitality without offering much in exchange. But these portraits are probably exaggerated; many parents enjoy the company – and sometimes help – of their adult children;¹ others might feel, for any number of reasons, that they have a duty to help their children during this particular period in their lives.

And parents who value family ties as much (or more than) economic independence may prefer that their children continue to live with them until some other rite of passage into adulthood such as marriage is marked.

So, who are the parents whose adult children still live at home? Are they less likely to have higher incomes and more likely to be immigrants? And how do these parents view their

coresidence experience? This study uses data from the 2001 General Social Survey to compare parents whose adult children are still at home with those whose adult children do not live with them anymore. It then examines whether or not coresidence is associated with significant negative outcomes, particularly in terms of conflicts within couples. It also contrasts parents whose adult children never left the house and those whose children returned to the nest after living independently for a time.

Parents who live in CMAs are more likely to live with at least one of their children

It is not news that young adults are more likely to live with their parents now than 20 years ago. In 2001, 57% of young men and women aged 20 to 24 were living with their parents; in 1981, the proportion was only 41%. Generally speaking, young adults who live with their parents are much more likely to be single, to attend school full time and to have lower income than young adults who are not living with their parents².

However, less is known about their parents. A number of characteristics are associated with the likelihood that parents coreside with their adult child or children. For example, parents born in Asia were three times more likely to coreside with their adult children than Canadian-born parents (73% compared with only 26%); similarly,

parents whose youngest child was in their early 20s were three to six times more likely to have an adult child at home than those whose youngest child was in their early 30s. (The table presented in the appendix illustrates these associations.)

In order to identify the relative importance of these different factors to the probability that parents coreside with their adult children, a multivariate statistical analysis was conducted. Only parents whose youngest child was between 20 and 34 years old were included in the analysis;³ of this group, 32% of parents lived with at least one of their adult children.

Holding the effects of other characteristics constant, the place where the parent lived had a significant impact on the likelihood that at least one of their adult children lived with them. Specifically, parents who resided in the largest census metropolitan areas (CMAs) were more likely to have an adult child at home: 41% of parents in Vancouver, 39% in Toronto, 34% in Ottawa and 28% in Montréal. In contrast, only 17% of parents living in rural areas or small towns shared their house with at least one of their adult children.

These results do not necessarily mean that parents who reside in smaller places are more reluctant to accommodate their adult children. Most postsecondary institutions are located in larger cities and for university or college students whose

Parent's characteristics	Predicted probability %
Place of residence	
Vancouver CMA	41*
Toronto CMA	39*
Ottawa-Gatineau CMA	34*
Montréal CMA	28*
CMA, population 500,000 - 1,000,000	35*
CMA, population 100,000 - 499,999	22*
CMA/CA, population 50,000 - 99,999	19
CA, population under 50,000	16
Urban outside CMA	18
Rural outside CMA	17
Region of residence	
Atlantic	25
Québec	27
Ontario	30
Prairies	17*
British Columbia	21

Note: Reference group shown in italics. CMA = Census Metropolitan Area; CA = Census Agglomeration.

* Difference is statistically significant from reference group when all other factors are held constant ($p < .05$).

Source: Statistics Canada, General Social Survey, 2001.

parents already live in a CMA, staying at home can be a financially attractive option; for some students, it might even be the only option. In contrast, young adults from more remote regions generally don't have that choice and many have to leave home to pursue higher education. Another factor is the cost of living in larger urban areas, which is significantly higher than elsewhere in Canada. Young adults with low incomes and/or an uncertain job future might hesitate longer before renting an apartment if their parents can provide housing.

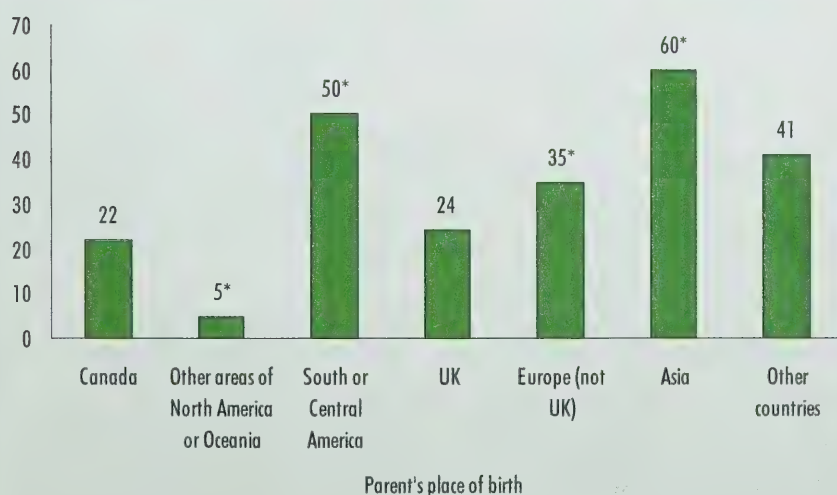
Province of residence was also associated with the likelihood that the parent of an adult child or children lived with at least one of them. In Ontario, parents had a 30% chance of living with an adult child; in contrast, the probability was significantly lower in the Prairies (17%).

South American and Asian-born parents most likely to live with adult children

The parent's place of birth also influenced significantly the likelihood that they lived with an adult child. Parents born in Europe (other than the UK), South America and Asia had much higher predicted probabilities (respectively 35%, 50% and 60%) than Canadian-born parents (only 22%). Previous studies have also documented this phenomenon⁴. In many societies, young adults are expected to live with their parents until they get married. Also in some cultures, like the Chinese culture⁵, caring for an aging parent is often considered a family obligation, while in some Southeast Asian cultures it is still very common for newlyweds to live with the husband's parents⁶.

For parents born outside Canada, place of birth was not the only factor affecting their probability of living with an adult child. Studies have found there is a relationship between the length of time spent in the new country and coresidence.⁷ Parents who immigrated to Canada before 1960 have a lower predicted probability (38%) of coresidence than

Predicted probability (%)



* Statistically significant difference from Canada when all other factors are held constant ($p < .05$).

Source: Statistics Canada, General Social Survey, 2001.

CST What you should know about this study

Individuals selected for this study were all Canadian parents whose youngest children was aged 20 to 34 in 2001. Although parents whose youngest child was younger than 20 years old could also live with an adult child, their family situation or their stage in the family life cycle is certainly different than that of parents whose children are all adults. The sample selected allowed better comparability between parents who live and don't live with their adult children.

Analytical techniques and statistical models

The results presented are predicted probabilities calculated from a logistic regression. They estimate the probability that a parent with a certain characteristic (for example, being born outside Canada) lives with one or more adult child, after taking into account – that is, after holding constant – all other factors included in the regression model.

All other predicted probabilities presented were calculated from the results of ordered logit models (except the dispute scale, see below). Control variables included in the regression model were all relative to the parent: gender, highest level of education, age, common law or married status, personal income, place of birth, province of residence, main activity during the year (working, looking for work, household work, retired, long term illness, other) and number of adult child(ren) living in the house (one, two and more, with zero as the reference category).

Specifically, ordered logit models were run for the following dependent variables, which are all ordinal level type of variables: satisfaction with the amount of time spent with the children (very satisfied to not satisfied at all); perception that the children take too much of the parents' time (strongly agree to strongly disagree); having children made the parents happier (strongly agree to strongly disagree); frequency of the different sources of conflicts (often, sometimes, hardly

ever and never) including money, children, chores and responsibilities, in-laws, showing affection. In an ordered logit model, the dependent variable takes the value (for example) of 4 for "very satisfied", 3 for "satisfied", 2 for "not satisfied" and 1 for "not satisfied at all." The model estimates the probability that an individual with specific characteristics reports being "very satisfied", "satisfied", "not satisfied" or "not satisfied." Four intercepts are estimated, taking into account the fact that the intensity of the difference between "satisfied" and "not satisfied" might be greater (or smaller, depending on the cases) than the difference between "very satisfied" and "satisfied". Predicted probabilities were calculated holding all other variables than the one of interest (presence of one, two and more or zero adult child at home) to their mean value for the sample considered.

"Dispute scale"

Respondents to the survey were asked: *Do you and your (spouse/partner) often, sometimes, hardly ever or never have arguments about...*

- chores and responsibilities
- your child(ren)
- money
- showing affection to each other
- leisure time
- in-laws

For each question, a score of 1 was attributed if the respondent answered "never," 2 if the respondent answered "hardly never," 3 if the respondent answered "sometimes" and 4 if the respondent answered "often." The scores for all questions were summed, resulting in an overall score ranging from 6 to 24.

Results reported in the text for the "dispute scale" come from an ordinary least squares regression, with the "dispute scale" as the dependent variable.

those who arrived between 1980 and 2001 (66%), holding constant all other factors, including place of birth.⁸ For those who came in the 1960s and 1970s, the likelihood was 43%. This indicates that, independent of place of birth, time spent in Canada decreased the likelihood of parent-adult child coresidence; in other words, that both place of birth and

length of residence in Canada play an independent role. For example, the likelihood that an Asian-born parent who immigrated between 1980 and 2001 lived with at least one adult child was 82%, holding other factors constant.

Parent's income and education not associated with coresidence...

Some authors have argued that parents in higher socio-economic positions may have a greater tendency to expect their children to be independent earlier than those with less education and income;⁹ others have said that parents with

greater incomes might use their resources to help their older adult children to leave home.¹⁰ In contrast, it has been said that some parents with fewer economic resources might encourage their children to stay in order to benefit from the presence of more earners at home.¹¹

However, the analysis of GSS data does not show support for these interpretations. Parents with a higher level of education were neither more nor less likely than less well-educated parents to live with their adult children. Nor were parents with high personal income any less likely than those with lower personal income to provide accommodation for their young adults.¹² It is quite possible, as sociologist Lynn White suggests, that "children's resources are much more likely than parent's resources to buy them independence."¹³

...but the type of family home is
If the parent's socio-economic status does not significantly influence the probability of living with an adult child, their house does make a difference. After holding all other factors constant, parents in a single detached house had a greater chance of sharing their home with at least one adult child (probability of 28%) than those in a low-rise apartment building (11%). Parents residing in a semi-detached, row house or duplex also had a significantly higher likelihood of having an adult child at home. Generally speaking, people who live in single detached houses or who own their homes also have higher socio-economic status. However, many parents with average incomes also own a single detached house. The multivariate analysis shows that what matters the most when it comes to accommodating an adult child is not the parental income, but the type of house the parents live in – having more space available increases the likelihood that parents and adult children will coreside.

Generally, the disruption of family structures by divorce or separation is associated with leaving home early.¹⁴

The results of the GSS analysis are consistent with these conclusions: married parents were more likely than divorced parents to live with their adult children. However, these results should not be misinterpreted. Many divorced and separated parents might live separately from their adult children not necessarily because the children have left home to live on their own, but simply because they were living with the other parent (the mother, in most cases). Indeed, the predicted likelihood for divorced or separated mothers to live with at least one of their adult children was more than twice as high as that for divorced or separated fathers, at 23% compared with 9%.

Being widowed was also associated with adult child coresidence. After accounting for other factors, widowed parents were almost as likely as

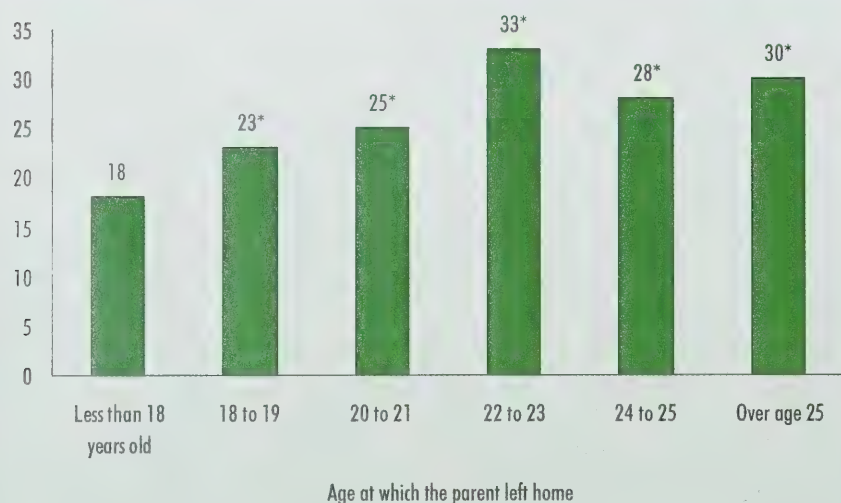
married parents to live with an adult child. It is quite possible that this type of living arrangement responds to the needs of the parent more than to the needs of the adult child.¹⁵ For example, some researchers have suggested that "children living with widowed parents may have closer emotional ties with parents and feel a greater pressure to live longer with parents who otherwise may be left alone."¹⁶

Households in which at least one parent is retired or ill might not be well-suited for parent-adult child coresidence. Indeed, compared to those who worked for pay, parents who were retired or ill were significantly less likely to live with their children (predicted probabilities of 28, 21% and 18%, respectively, while holding other variables constant).

GST Parents with houses, as well as those who are married or widowed, have a higher predicted probability of coresiding with adult children	
Parent's characteristics	Predicted probability %
Type of dwelling	
Single detached	28*
Semi or duplex	27*
High rise	17
Other	13
<i>Low rise</i>	11
Marital status	
Common law	11
Married	28*
Widowed	27*
Separated	18
Single	24
<i>Divorced</i>	17
Main activity during the year	
<i>Working</i>	28
Looking for work	28
Other	24
Housework	29
Retiree	21*
Illness	18*

Note: Reference group shown in italics.
 * Difference is statistically significant from reference group when all other factors are held constant ($p < .05$).
 Source: Statistics Canada, General Social Survey, 2001.

Predicted probability (%)



* Statistically significant difference from "Less than 18 years old" when all other factors are held constant ($p < .05$).

Source: Statistics Canada, General Social Survey, 2001.

The last variable of interest is the age at which the parent left home when he or she was young. Taking all other variables into account, parents who moved out of their own parents' house before age 18 were significantly less likely to live with an adult child than those who did so at an older age. It appears that those parents who left the house early may have provided an example for their own children. Alternatively, it might mean that they applied more implicit or explicit pressure on their children to leave the house earlier.

In sum, parents who were most likely to live with at least one of their adult children lived in a large urban area in Ontario, were born in Asia or in South America, lived in a single detached house, were married and left their family home after age 21.

The consequences of living with an adult child

Sometimes, the coresidence of parents with their adult children is portrayed in very negative terms. Many of these adult children are said to stay at home without contributing much, have a newer car than their parents and, to complete the picture, are as messy as when they were teenagers. Stress, discouragement and eventual conflicts between parents are said to be part of the routine in these households. Are these perceptions overstated?

GSS respondents were asked if they strongly agree, agree, disagree or strongly disagree with the following two statements: "I am often frustrated because my children take so much of my time."; and "Having children has made me a happier person." They were also asked whether they were very satisfied, somewhat satisfied, not very satisfied or not satisfied at all with "the amount of time I spend with my children."

An analysis comparing parents living with at least one adult child with those who did not supported, at least in part, the idea that sharing the house with an adult child might come with some frustrations. After holding constant other variables like

Predicted probability

Parent's characteristics

%

Number of children aged 20 to 34

One	20
Two	27*
Three or more	32*

Age of the youngest child

20 to 21	64
22 to 23	47*
24 to 25	34*
26 to 27	22*
28 to 29	11*
30 to 31	13*
32 to 34	11*

Ratio of boys and girls

All girls	23
All boys	28*

Note: Reference group shown in italics.

* Difference is statistically significant from reference group when all other factors are held constant ($p < .05$).

Source: Statistics Canada, General Social Survey, 2001.

the level of education, age, gender and income, parents who were living with two adult children were twice as likely to report that they often felt frustrated because their children took so much of their time; the predicted probability that these parents agreed or strongly agreed with the statement was 8%, compared to 4% for parents whose adult children did not live with them. That being said most parents, whether or not they lived with their adult children, disagreed or strongly disagreed with the statement.

While some parents living with their adult children might experience some kinds of frustration, they might also be rewarded, for example when the adult children contribute to the household by doing housework or providing emotional support and companionship¹⁷. They might also be more satisfied with the amount of time they spend with their children. Overall, the majority of parents whose youngest child was aged 20 to 34 said that they were very satisfied with the amount of time that they spent with their children (54%). However, that proportion was significantly higher for parents who lived with at least one of their adult children. Holding other factors constant in a statistical model, 64% of parents living with one adult child at home reported being very satisfied with the amount of time they spent with their children, compared to 49% for other parents. Some of the parents who lived with their adult children could have felt that the amount of time they spent with their adult children was just "too much" – and therefore could have said that they were not very satisfied with it. However, as the results show, a little "too much" time could be better than "not enough" for many parents.

Most parents agree that having children has made them happier people. Does coresidence with an adult child persuade parents to change their minds? Apparently not: parents living with their adult children were equally likely to say that having

children made them happier. In summary, it can be said that parents who live with an adult child were more likely to express some frustration, but that they were no more likely to express regrets about having had children. On the contrary, a greater proportion of parents living with at least one of their adult children were very satisfied with the time they spent with their children.

Marital quality

What about couples' relationships? In that respect, the coresidence of parents with their adult children seems to have more consequences. But again, they were far from being disastrous.

The presence of adult children at home slightly increased the frequency with which the parents reported having arguments with their spouse over various issues such as money, children, chores and responsibilities, in-laws and showing affection. A higher score on the dispute scale (low score equals 6, high score equals 24) indicates a higher frequency of disputes. Everything else being equal, married parents¹⁸ who lived with one adult child were significantly more likely to report greater frequency of conflict than married parents whose children had left home (0.4 points higher on the scale). Parents who were living with two adult children scored 1.4 points higher, a difference that was also statistically significant.

Why should couples living with an adult child be more likely to be involved in conflicts than others? Some authors have argued that the departure of an adult child lowers the level of conflict that often accompanies the arrival of a child in the marriage;¹⁹ this new stage in life is also said to provide parents with the satisfaction of having completed "successfully" the responsibility of childrearing. When the adult children delay their departure from home, it is possible that the frequency of conflict within couples remains higher a little longer. Results, while not proving

that this is necessarily the case, are somewhat consistent with these interpretations.

However, not all types of conflicts included in the scale were similarly frequent sources of arguments between married parents. The following possible conflict issues for couples were examined separately: chores and responsibilities, children, money, showing affection to each other, leisure time and in-laws.

The likelihood of arguing often or sometimes over questions of money was greater when there were two or more adult children at home (predicted probability of 31%). This compares to 23% when only one adult child was living at home and to 21% when all children had left the house. The greater frequency of conflict is understandable since living with two other adults certainly implies some additional costs for the parents, even when the children contribute to the family economy. For some families, more costs may imply greater risk of conflicts over money.

Parents who lived with two or more adult children also had a higher predicted probability of reporting arguments often or sometimes with their spouse about their children (40%, after taking into account other factors). This rate was twice the likelihood recorded for parents whose children had left home.

Finally, the presence of children was related to conflicts about chores and responsibilities. The likelihood of having arguments often or sometimes with their spouse about this issue was 39% when married parents coresided with two or more adult children, and 33% when they coresided with one; in contrast, it was significantly lower (28%) for parents whose adult children had left. Whether the adult child participates or not in the chores, additional people in the home generally increases the total amount of household work, which in turn can increase the risk of disagreements for parents. However, other types of conflicts that can arise between all

couples – about showing affection to each other, about leisure time and about in-laws – were neither more nor less likely to occur between parents who had adult children living with them than between those who did not.

The boomerang kid phenomenon

Adult children who return to live in the parental home after having left to live independently are sometimes referred to as "boomerang kids." One-quarter (24%) of parents who lived with adult children were in fact living with a boomerang kid. For these parents, a returning child may have different consequences than for parents whose adult children had never left home, since they may have thought their children had left for life. Supplementary GSS analyses supported, at least in part, the suggestion that it is a different experience.

First, parents who were living with at least one boomerang kid were more likely to express frustration because their children took so much of their time (8% versus 5% of parents living with non-boomerang children). After the return of an adult child, many mothers may experience a return to the "second shift,"²⁰ which might affect their satisfaction. Also, parents of boomerang kids were less likely to agree strongly with the statement "*Having children has made me a happier person*" (predicted probability of 57% versus 68%). However, for married parents, the frequency of conflict between the couple was not significantly greater with a boomerang kid than with an adult child who had never left home.

Summary

Parents of children at least 20 years old are much more likely than others to be living with at least one of their adult children if they live in a large CMA, own a single detached house, and were born in Asia, South America

or Europe. Socio-economic status is not associated with coresidence with an adult child. Parents are more likely to express higher frequency of conflicts within their marriages; however, the difference between them and parents whose adult children had left the house are probably smaller than they are sometimes perceived to be. The most frequent causes of conflict included money, children, and household chores and responsibilities.

Since the GSS data were collected in 2001, better labour market conditions have developed across the country, improving employment opportunities for new labour force entrants; as such, the proportion of parents living with an adult child may have decreased. It would be interesting to assess whether, as general economic conditions become more positive, the presence of an adult child in the home has more profound consequences on parental well-being than shown by the results of this study.


Martin Turcotte is an analyst in the Social and Aboriginal Statistics Division, Statistics Canada.

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Characteristics of respondent parent	% of parents with youngest child aged 20 to 34	Characteristics of respondent parent	% of parents with youngest child aged 20 to 34
Total	32	High rise apartment	28
Place of residence		Low rise apartment	15 ^E
Vancouver CMA	46	Other	F
Toronto CMA	54	Marital status	
Ottawa-Gatineau CMA	37	Married	35
Montréal CMA	32	Common law	17 ^E
CMA, population 500,000 - 1,000,000	36	Widowed	24
CMA, population 100,000 - 499,999	29	Separated	27
CMA/CA, population 50,000 - 99,999	23	Single	33 ^E
CA, population under 50,000	21	Divorced	23
Urban outside CMA	23	Main activity during the year	
Rural outside CMA	20	Working	39
Region of residence		Looking for work	36 ^E
Atlantic	22	Other	30 ^E
Québec	28	Housework	33
Ontario	39	Retired	19
Prairies	25	Illness	22 ^E
British Columbia	31	Age at which the parent left home	
Place of birth		Less than 18 years old	22
Canada	26	18 to 19	27
Other areas of North America or Oceania	F	20 to 21	32
South or Central America	59	22 to 23	39
UK	32	24 to 25	39
Europe (not UK)	43	Over age 25	38
Asia	73	Age of the youngest child	
Other countries	53	20 to 21	65
Gender		22 to 23	49
Male	32	24 to 25	38
Female	32	26 to 27	28
Age		28 to 29	15
Under 50 years	46	30 to 31	16
Age 50 to 59	34	32 to 34	11
Age 60 and over	22	Number of children aged 20 to 34	
Highest level of schooling		One	20
University	36	Two	37
College	34	Three or more	43
High school	35	Ratio of stepchildren	
Elementary	25	Zero	32
Personal income		All	15 ^E
Under \$20,000	26	Ratio of children adopted	
\$20,000 to \$39,999	31	Zero	32
\$40,000 to \$59,999	37	All	18 ^E
\$60,000 and over	35	Ratio of boys and girls	
Type of dwelling		All girls	24
Single detached house	34	All boys	29
Semi-detached or duplex	36		

^E Use with caution.

F Sample too small to produce reliable estimate.

Source: Statistics Canada, General Social Survey, 2001.

Young adults who give and receive help

by Anne Milan

Although Canadians, in general, have a reputation for helping others when needed, young people do not always enjoy such a positive image. Popular opinion and the media often portray youths in our society as lazy, or indifferent. However, many young people are actively engaged in positive and altruistic social behaviours. Famous young Canadians such as Craig Kielburger, children's rights activist, Ryan Hreljac, who spear-headed a campaign to build wells in Africa, and, of course, Terry Fox, illustrate how young people can touch many lives and inspire others to do the same.

While most helping behaviour occurs on a much smaller scale, it can still promote a sense of fulfillment and connectedness to others. Researchers have pointed out that, "anyone who treats another person in a kind and helpful way creates a small benefit that is likely to be passed along."¹ Running errands for a senior, mowing the lawn for a neighbour, or consoling a friend who has just experienced a relationship break-up or parental divorce—these are all valid forms of helping. As an additional benefit, young adults acquire social skills such as empathy and understanding as they learn to help others.²

Providing help, however, is only half of the story. Everyone, including those who prefer to give, needs help of some type from time to time. A willingness to accept help can make all the difference when coping with the challenges—large or small—of life.³ It is, therefore, not only the



GST What you should know about this study

Using the 2003 General Social Survey (GSS), this paper examines the extent of helping behaviours given and received by young adults aged 15 to 24. This age group was chosen because the positive social behaviours of young adults are not often examined. The results are based on a sample of nearly 3,200 youth representing 4.2 million Canadians in this age range.

Particular helping behaviours given and received in the month prior to the survey included providing emotional support; teaching, coaching, or giving practical advice; providing transportation or running errands; doing domestic work, home maintenance or outdoor work; helping with child care; or other forms of help. Unless a particular type of helping behaviour was specified, help given or received can refer to any one or more of these behaviours.

Respondents were asked to exclude help given to, or received from, those with whom they live, help given as a volunteer for an organization, or help obtained from an organization. In addition, respondents were also asked if they provided or received any of these forms of help on a regular basis, with regularity interpreted by the respondent.

ability to give help that is important, but also the capacity to receive it when required.

The 2003 General Social Survey (GSS) can be used to shed light on the extent to which young people

aged 15 to 24 provide, and also receive, various forms of help, such as offering emotional support; teaching, coaching, or giving practical advice; providing transportation or running errands; doing domestic work, home maintenance or outdoor work; or helping with child care.

Most young people are both giving and receiving help

The majority of young people both give and receive many types of

assistance. According to the 2003 GSS, 87% of young people aged 15 to 24 provided some form of help in the month prior to the survey. In fact, they had a higher rate of providing help than any other age group, a trend which decreased with age to a low of 60% for seniors aged 65 or older.

A similar pattern exists for receiving aid. Nearly 8 in 10 (78%) individuals in their late teens or early twenties indicated that they

received assistance, compared with less than half of seniors (47%). These differences in the care behaviours of young and old Canadians may reflect the social situation they tend to find themselves in. While many seniors are retired, young people are more likely to be either in school or in the labour force, environments with ample opportunities for meeting people and exchanging assistance.

Many young people give and receive multiple forms of help. Some 55% provided, and 37% received, at least three different types of assistance in the month prior to the survey. Furthermore, many youths not only give and receive aid, but do so on a regular basis (as interpreted by respondents): according to the 2003 GSS, 42% of young adults aged 15 to 24 offered, and 33% accepted, assistance regularly.

Helping is reciprocal

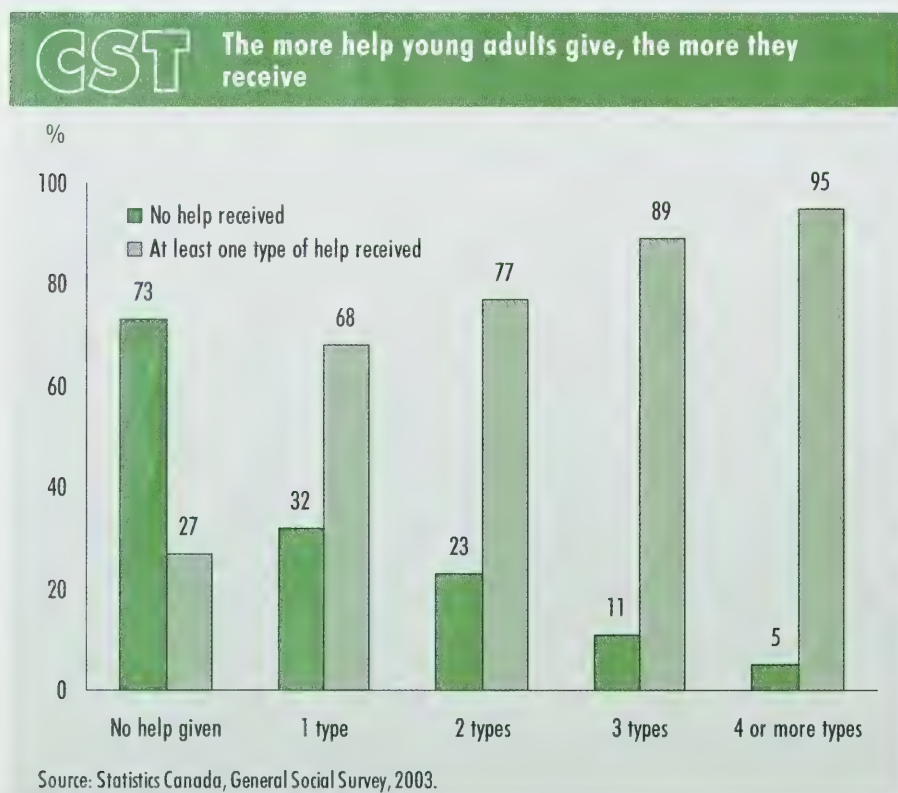
It has been said that people "get what they give," and it would seem that this holds true, at least in terms of helping behaviour. Data from the 2003 GSS show that young adults who helped others the most were also the most likely to receive help. About 95% of youths who provided four or more types of help in the month prior to the survey also received at least one type of assistance. In comparison, 68% of young adults who gave one type of help accepted aid during the same time frame, while only 27% of those who offered no help at all received assistance from someone else.

Emotional support most common type of help exchanged

Emotional support can be a great source of comfort during challenging times such as employment difficulties, relationship breakdowns, or other interpersonal problems. It was the most common type of helping behaviour both offered and obtained by 15- to 24-year-olds: 67% provided a "listening ear" or a "shoulder to cry on", while 57% reported receiving such comfort.

GST Many young adults give and receive several types of help		
	Help given	Help received
	% of 15- to 24-year-olds	
No help	13	22
At least one type of help	87	78
One type	13	20
Two types	19	21
Three types	24	22
Four or more types	31	15
Total	100	100

Source: Statistics Canada, General Social Survey, 2003.



15- to 24-year-olds who give or receive help

	Give	Receive
	%	
Type of help		
Emotional support	67	57
Teaching, coaching, or giving practical advice	59	52
Transportation or running errands	50	46
Domestic work, home maintenance or outdoor work	45	21
Helping with child care	26	5
Other	13	10

Note: Percentages do not add to 100% as multiple responses were possible. Help given and received occurred during month prior to the survey.

Source: Statistics Canada, General Social Survey, 2003.

15- to 24-year-olds who give or receive help

	Give	Receive
	%	
Relationship to young person		
Friend	74	62
Relative	30	33
Neighbour	9	7
Other person	7	8

Note: Percentages do not add to 100% as multiple responses were possible. Help given and received occurred during month prior to the survey.

Source: Statistics Canada, General Social Survey, 2003.

Women are often thought to be more skilled at nurturing relationships than men, and therefore, may be more open to giving and receiving less tangible assistance, such as emotional support. This, in fact, appears to be the case as women in their late teens and early twenties were much more likely than young men to give emotional care to someone (76% and 58%, respectively). Similarly, a higher proportion of young women received emotional support (66% versus 49% of young men).

Women also provided childcare in larger proportions (36% compared with 17% of men), while young men were more likely to help with work

around the house (domestic work, home maintenance or outdoor work) than were young women: 52% and 38%, respectively. Whereas young men and women tended to give and receive help with different tasks, overall, they did so in similar proportions.

Friends are most likely to be sources and recipients of help

According to an earlier study, a strong feeling of support from one's social network increases feelings of attachment and community involvement.⁴ For adolescents, who struggle to establish their own identity, that social network consists of peers—friends who become

increasingly important and who may, during these years, replace parents as a source of support.⁵ It is, therefore, not surprising that young adults were more likely to offer help to friends than to relatives and other acquaintances. Among 15- to 24-year-olds who helped others, 74% provided assistance to friends, 30% to relatives, 9% to neighbours, and 7% to someone else. The pattern for receiving aid was similar.

In addition, the size of the peer support group was an important influence on help given and received: the more friends a young person had, the more help they gave and received. For example, 92% of 15- to 24-year-olds with six or more friends reported providing help, compared with 81% of those with two or fewer friends. The situation was comparable at the receiving end. In contrast, the number of close relatives was not as important a factor in the helping behaviour of young adults.

Different types of help for different people

Young adults provide different types of help to friends, relatives and others. Friends were most likely to be offered emotional help (among youth who provided emotional help to others, 89% directed this type of support to friends); teaching, coaching or giving practical advice (88%); and transportation (87%).

In contrast, relatives were more likely to be offered child care (47%) than emotional support (35%) or teaching, coaching or giving practical advice (35%). A similar pattern existed for receiving help from friends and relatives.

Type of help exchanged varies with age

In general, the types of help given and received vary by age. For example, young adults aged 20 to 24 were more likely to assist with transportation or running errands than were 15- to 19-year-olds (54% versus 46%), probably because many teens do not

yet have a valid driver's license. Doubtless for similar reasons, teens aged 15 to 19 were more likely to receive assistance with transportation than were people in their early twenties (54% compared to 39%). As well, a higher proportion of teenagers were offered help in the form of teaching, coaching, or practical advice than their older counterparts (59% versus 46%).

Group involvement increases helping behaviour

Participation in either formal or informal organizations—ranging from casual get-togethers with friends to sports teams or religious associations—increases interaction with others and creates opportunities for offering and accepting help. According to data from the 2003 GSS, 94% of young people who belonged to three or more groups provided help to other people, compared with 82% of youths who had no group affiliations.

Similarly, those who were members of several groups were also more likely to receive help. Nearly nine in ten (87%) young adults who were

affiliated with at least three groups received some type of assistance during the month prior to the survey, compared with 72% of those who did not belong to any groups.

In addition to group membership, volunteering is also associated with providing assistance to others. For example, among those who volunteered, 65% reported teaching, coaching or giving practical advice, compared with 56% of those who did not volunteer.

Additional analysis of GSS data showed that quality of life factors, such as levels of stress, personal happiness, overall life satisfaction, religiosity, and sense of belonging to the community were not strongly associated with either giving or receiving help. Similarly, household income was not a central factor in young adults' helping behaviour.

Summary

Overall, most young people aged 15 to 24 are providing, as well as receiving, help. Emotional support is the most common type of support given and received, and friends are the most likely givers and receivers of

all types of assistance. Belonging to groups, whether formal or informal, as well as volunteering, are activities which promote helping behaviour. To the extent that behaviour in youth continues throughout life, learned helping behaviour may set the stage for both providing and accepting help in later life.



Anne Milan is an analyst with *Canadian Social Trends*, Statistics Canada.

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Home heating and the environment

by Bradley Snider



The improvement of society's standard of living is generally seen as a desirable goal, but it sometimes seems to conflict with the equally valid goals of maintaining the quality of the environment and operating within the limits of finite non-renewable resources; in other words, sustainability.

The ratification of the Kyoto treaty and rising energy costs have renewed interest in the environmental impact of household heating. This is a highly visible use of energy with which most Canadians are intimately familiar. But as with all activities involving energy use, the heating and cooling of our homes have consequences for our environment.

In 2003, the residential sector accounted for about 6% of total Canadian greenhouse gas emissions.¹ That percentage may appear low, especially when compared with the transport sector which was responsible for about 26% of greenhouse gas emissions. However, the impact of the residential sector could have been much greater if the type of energy used to heat Canadian homes had not changed so dramatically over the past 50 years.

Using the Survey of Household Facilities and Equipment and the Survey of Household Spending,

GST What you should know about this study

This article draws on the Survey of Household Facilities and Equipment (HFE) and the Survey of Household Spending (SHS). Beginning in 1947, the HFE collected up-to-date data on household equipment in private households in the 10 provinces, providing information about Canadians' standard of living and identifying changes in household characteristics. As of 1997, the HFE was integrated into the annual Survey of Household Spending (SHS), which obtains detailed information about household spending, dwelling characteristics and household equipment, as of December 31 each year. The SHS covers about 98% of the population in the 10 provinces, with yearly data available for the territories from 1997 to 1999 and every second year thereafter beginning in 2001.

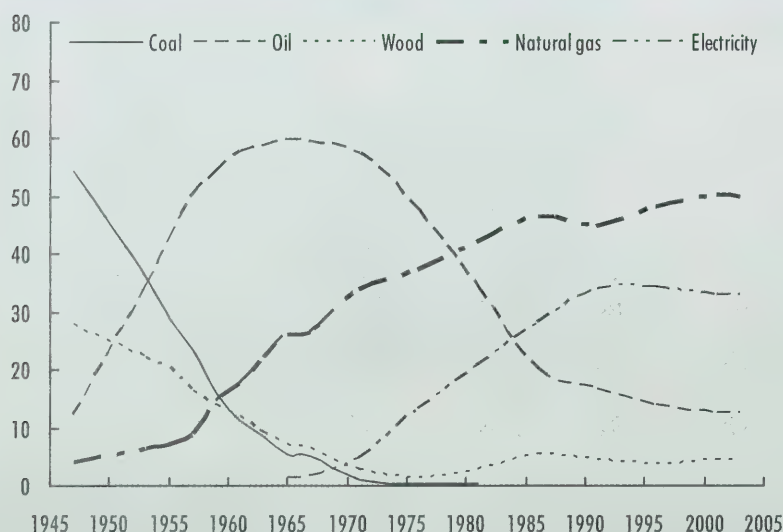
this article shows that, since the 1940s, Canadians have rapidly adopted new energy sources for household heating. It then shows how these important changes have affected greenhouse gas emissions attributable to the residential sector in recent decades.

More households do not necessarily mean more emissions

Individual homeowners can attest that improvements in home design, insulating materials and the efficiency of home heating equipment have

certainly made modern homes more energy efficient. At the national level, two important factors are associated with the quantity of greenhouse gas (GHG) emissions produced by the residential sector: the total number of households and the type of energy used to heat them. Not surprisingly, the greater the number of households, the greater the potential quantity of greenhouse gas emitted into the atmosphere. However, the relationship between the number of households heated and the quantity of emissions is highly dependent on the type of energy used.

% of households reporting



Source: Statistics Canada, Survey of Household Facilities and Equipment and Survey of Household Spending, 1947 to 2003.

All sources of energy are not equally GHG friendly. For example, natural gas and electricity (when produced with low emission technologies such as hydroelectricity) have fewer negative consequences than oil. Thus, if an increase in the number of households is accompanied by simultaneous changes in favour of low emission sources of energy, the negative environmental effects of heating more households might be partially or entirely offset. Over the last half century, energy sources have changed continually.

In 1951 there were about 3.4 million households in Canada; by 2001 the number had reached nearly 12 million. So as a first approximation, the demand for household heating more than tripled over this period.²

However, the type of energy demanded by households has changed dramatically in the last 50 years. In 1947, over 83% of households relied on burning solid fuel – coal (55%) or wood (28%) – with the daily

maintenance and attention that that required. Only 12% of households heated with oil and 4% with natural gas. Electric heating was virtually unknown.

By 1965, less than 20 years later, domestic heating had been revolutionized. Coal and wood had dwindled to only 10% of households, while oil heating had peaked at nearly 60%. The construction of the Trans-Canada natural gas pipeline in the 1950s allowed 26% of homes to heat with gas. Electric heat was still rare, though, reported by only 1% of households.

The oil shocks of the 1970s, and subsequent government policies favouring electricity (in Québec) and natural gas (in Ontario and the Western provinces), precipitated the decline of oil as a heating fuel. Trends in this direction had already begun as early as 1966, suggesting that consumers were responding to their own sense of efficiency and economics. By 1985, oil had

dropped to third place behind gas and electricity as a heating source. Wood heat, interestingly, enjoyed a small renaissance in the 1970s and has accounted for a steady 5% of households since then. Coal, however, has effectively vanished as a home fuel.

By 2003, the picture had changed again. Electricity, which peaked in popularity in the mid-1990s, dropped slightly to heat 33% of households. Oil decreased to only 13% of households, about the same as in 1947, while natural gas reached an all-time high as the heating source for 50% of households.

When the principal energy source is shown in terms of the absolute number of households (rather than the share of households), the picture changes slightly. Here, the decline of oil in absolute terms begins in 1970, but it is still precipitous. Wood is used by almost half a million households, almost as many as in the 1950s. The total number of households using gas in 2003 (over six million) is almost double the number that ever used oil. And although the growth in electric heating seems to have ended in the mid 1990s, electricity still heats more homes in 2003 than oil ever did.

Changes in energy sources used affect greenhouse gas emissions

The quantity of greenhouse gas emissions attributed to the residential sector in 2003 reflects the increase in the number of households, improvements in energy efficiency and heating technologies, and the changes in the types of energy used. Over the past 50 years, the number of households has more than tripled; however at the same time, sources of energy which produce large quantities of greenhouse gas (GHG) – coal and oil – have gradually been replaced by more environmentally friendly sources such as natural gas and hydroelectricity. The evolution of the quantity of emissions attributable to the residential sector in the nineties illustrates very well this situation.

According to a 2005 Environment Canada report, "residential emissions have remained fairly constant between 1990 and 2002, increasing 0.3 Megatons (Mt) over this period".³ This stability could certainly be considered an improvement, given that the number of households grew nearly 22% over this period (from 9.8 to nearly 12 million).

Without changes in the sources of energy used to heat the houses in the past 50 years, the picture would have been much different. If households in 2002 were still using, in the same proportions, the type of energy sources used in 1965, the quantity of GHG emissions produced by the residential sector would no doubt have been far higher than they currently are.⁴ Overall, it is evident that growth in the efficiency of fuel use – using less GHG-intensive energy sources, updated furnaces and improved insulation, among other factors – has been remarkable.

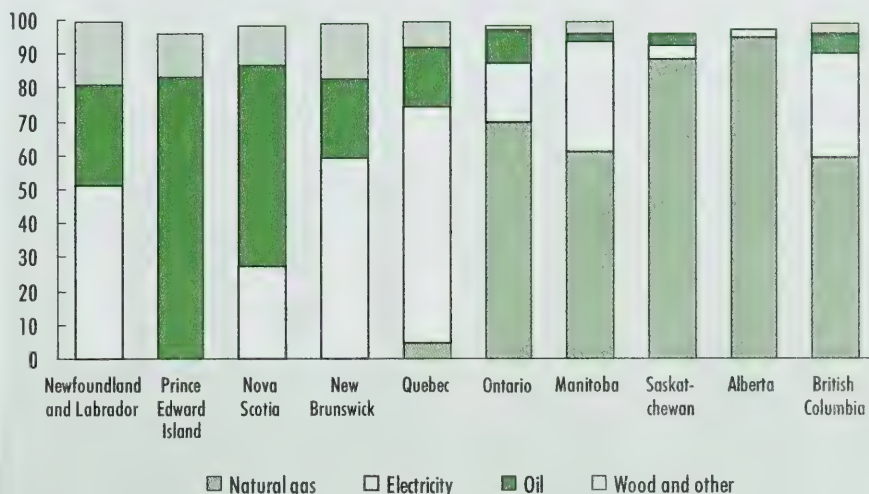
Natural gas is almost absent east of Ontario

The changes in energy use observed at the national level overshadow important variations at the regional level. Use of natural gas depends on the presence of pipelines. Since the 1950s, use of natural gas has grown along with the extent of the pipeline network. The small number of Atlantic Canadian households that reported using natural gas as their principal energy source reflects limited availability in those provinces.⁵ On the other hand, the majority of households in the western provinces and Ontario used natural gas as the principal energy source. Not surprisingly, virtually all households in Alberta (97%) were heated with gas.

Electricity is the leading heating source in Québec (68%), New Brunswick (56%), and Newfoundland and Labrador (50%), while oil is the leading heating source in Prince Edward Island (81%) and Nova Scotia (60%).

CST Sources of primary heating fuel differ across the country, with oil and electricity most common east of Ontario and natural gas west of Quebec

% of households reporting



Note: May not add to 100 due to missing values for some fuel types.

Source: Statistics Canada, Survey of Household Spending, 2003.

Wood is used in over one in seven households in the Atlantic Provinces. In 2003, wood and other solid fuels were the primary heating source for 16% of households in New Brunswick and 19% in Newfoundland and Labrador.

Apartment buildings are more likely to be heated with electricity

There are social as well as geographical dimensions to household heating. Over half (56%) of apartment buildings are heated with electricity, compared with fewer than one-quarter (23%) of houses (single detached, semi-detached, row houses and other types of single attached houses). Electric heat has advantages for landlords, since it is easier to meter individually and requires less maintenance. In contrast, 56% of houses used natural gas as their principal heating fuel, but only 34% of apartments. Oil is used by a minority of both dwelling types: 14% of houses and 9% of apartment buildings.

Since the great majority of apartment dwellers are renters (79% according to the 2001 Census), renters are about twice as likely as homeowners to use electricity, at 48% versus 25% in 2003. And with most houses being owner-occupied (86% in 2001), owners more often heat their homes with natural gas than electricity (54% versus 39% of renters).

Renters are often low-income households. Indeed, the majority (63%) of households in the lowest income quintile rent their homes, compared with only 13% of those in the highest income quintile. Consequently, sources of home heating vary across income groups.

Among households in the bottom income quintile, 44% heat their homes with electricity and 39% heat with natural gas. In contrast, among households in the top income quintile, 20% heat their homes with electricity and 67% heat with natural gas. The use of oil varied less across income groups, ranging from 10% to 15%.

Some of the interaction between dwelling type and heating source is related to social characteristics unique to certain regions as well. Quebec has the highest proportion of apartment dwellings in the country (38%) and electric heating is used in 81% of these buildings, a usage rate much higher than the national average.

Sustainability

Regional variations in energy use show that options to lower GHG emissions attributable to the residential sector must look at where real gains can be made. For example, oil is the dominant fuel in most of the Atlantic Provinces, used by about 390,000 households in 2003. Oil is used by a much smaller fraction of homes in Ontario and Québec, but these totalled over 981,000 households. Since alternative types of energy are available in these provinces (hydroelectricity in Québec and natural gas in Ontario) converting these households would have significant consequences for the quantity of GHG emissions attributable to the residential sector. Where natural gas is not easily available, these conversions would be more difficult to achieve.

Using electric heat does not have the same consequences for GHG emissions in every province. Where electricity is produced by coal or oil-fired generating plants (Ontario, Saskatchewan, Alberta, Nova Scotia and New Brunswick), the use of electricity for home heating will result in greater levels of emissions than in provinces where hydroelectricity is dominant (Québec, Manitoba, Newfoundland and Labrador, and British Columbia).

Summary

While sectors like road transportation have increasingly contributed to higher levels of greenhouse gas emissions, the same cannot be said of the residential sector. Over the last 50 years the domestic energy industry has been continuously

GST Alternative energy sources

For several decades, researchers have been investigating the development of alternative sources of energy, mainly in an effort to reduce pollution but also to diminish society's dependence on fossil fuels. Most renewable alternatives are used to generate electricity, which can then be used for household heating in addition to lighting and running household appliances. *Active solar* energy uses photovoltaic cells to convert solar energy into electricity. *Wind power* can be stored in forms other than electric cells (pumping water into reservoirs which then generate hydroelectric energy); in Europe, significant amounts of energy are being derived from wind farms – 18% of electricity in Denmark in 2003, for example.¹ *Biomass* energy uses organic waste material as fuel for power generating plants in an effort to recycle waste materials in a meaningful way. Similarly, *methane* (the principal component of natural gas) can be derived from the decay of organic material in landfill sites, where the escaping gas is captured and burned for energy. Enormous quantities of *methane hydrate* – natural gas in the form of “ice” – believed to be trapped in ocean sediments also represent an important energy resource. Unfortunately, the cost of producing energy with these methods remains a considerable barrier to their use. For example, battery technology remains fairly primitive meaning that electric batteries are still inefficient fuel sources compared with fossil fuels, and wind turbines require a lot of maintenance to operate efficiently. Similarly, the depths at which methane hydrate is found make it expensive to extract and its extreme volatility makes it dangerous to handle.

Some alternative energy sources can be used for home heating directly. Returning to the traditions of pre-20th century architecture, *passive solar* energy takes advantage of a building's site to let sunlight heat, light and cool it (cooling breezes are created by the action of solar heat on air). *Geothermal* energy can also heat homes directly by using a pump that draws heat energy from the earth or ground water.

Sources: Energy Information Administration, Department of Energy, United States Government (http://www.eia.doe.gov/cneaf/solar.renewables/page/renew_info/faq.html); Kunstler, J.H., *The Long Emergency*. Atlantic Monthly Press; New York, N.Y. 2005.

1. Kunstler, 2005: 127.

evolving. Increases in the wealth and average standard of living of Canadians have been accompanied by a constant change in household heating technology and energy sources. Canadian households, both on their own and in response to government policies, have been eager to embrace these innovations as soon as price and availability allowed. This has allowed more households to heat

themselves in a comfortable manner while greenhouse gas emissions have remained steady or even declined over the last decade.


In particular, between 1965 and 1995, the number of households in Canada using electricity for heating increased from almost zero to over 4 million, while the number using oil decreased by about 2 million. In British Columbia, Québec, Manitoba,

and Newfoundland and Labrador, where hydro-electricity is abundant, this represents a tremendous drop in greenhouse gas emissions. However, there has been almost no growth in the number of homes using electricity since 1995.

Natural gas has emerged as the home heating fuel of choice, its use constrained only by the limits of distribution networks. It is the dominant fuel in all provinces west of Quebec, and has been the only fuel whose use has grown in the last decade.

Improved efficiencies have kept greenhouse gas emissions constant over the last decade despite considerable growth in the number of households. It seems then that home heating, though an obvious policy target, may not be the best source to find major national reductions in GHG emissions. However, as illustrated by the regional differences in home heating, future improvements are still possible.

As a concluding remark, it is apparent that the home energy scene in Canada is a dynamic one. Both climate change and the ever-evolving energy supply situation will continue to pose new problems to solve. Canadian households have shown great flexibility in the last 50 years, readily adopting new technology and energy sources for home heating. This bodes well for their ability to adapt to the new energy and environmental challenges of the next half century.



Bradley Snider is an analyst with Income Statistics Division, Statistics Canada.

1. Environment Canada, "Summary: Canada's 2003 Greenhouse Gas Inventory," www.ec.gc.ca
2. Although the population doubled from 1951 to 2001, the number of households increased by over 3.5 times. This is related to the long-term decline in the number of persons per household which began in the 19th century, from 5.6 persons per household in 1881 to 4.0 persons in 1951, and down to 2.6 persons in 2001. Increasing average wealth, smaller families and a higher standard of living explain most of this decline. If average household size had remained the same between 1951 and 2001, there would be only 8 million households now, so there are about 50% more households in 2001 than would have been predicted from population change alone.
3. Environment Canada. 2005. *Canada's 2002 Greenhouse Gas Inventory*.
4. Environment Canada, 2005.
5. Natural gas pipelines are new to the Atlantic Provinces and the distribution network is not yet very extensive. The first households in Nova Scotia to use natural gas were hooked up in January 2004, and the province had 1,400 paying customers by the end of that year.

Passing on the ancestral language

by Martin Turcotte

Many immigrants feel that teaching their own mother tongue to their Canadian-born children is of paramount importance. Aside from the cultural value that maintaining a linguistic identity provides, research suggests that learning the ancestral language may afford children with some socio-economic benefits. First, the knowledge of additional languages is increasingly recognized as a significant asset.¹ Second, proficiency in both an official and a non-official language, along with a strong ethnic identity, can in some cases play a role in children's academic success.² And, third, in neighbourhoods with a high proportion of immigrants, fluency in an ancestral language can enable participation in ethnic businesses and social life.³

Using data from the 2002 Ethnic Diversity Survey (EDS), this article examines the preservation of ancestral languages by looking at the extent to which allophone immigrants (i.e. those whose mother tongue is neither English nor French) have transmitted their mother tongue to their Canadian-born children. Data in this analysis come from interviewing Canadian-born persons aged 15 and over whose parents were allophone immigrants. For simplicity, these individuals are referred to in the article as *respondents*. The analysis focuses on the factors associated with the probability of the ancestral language being the respondent's

mother tongue, the respondent's ability to speak the ancestral language, and his or her regular use of this language in the home.

Few children can converse in their grandparents' mother tongue

According to a number of studies in the United States, the knowledge and use of ancestral languages tend to disappear rather quickly among children of immigrants. In general, these studies found that most grandchildren had virtually no understanding of the mother tongue of their immigrant grandparents.⁴ Is the transmission of ancestral languages to subsequent generations similar in Canada or does one find an appreciable difference?

According to the 2002 Ethnic Diversity Survey (EDS), 64% of respondents learned their parents' ancestral language first in childhood. A larger proportion, 74%, reported that they were able to carry on a conversation in their parents' mother tongue. This gap may seem surprising until one considers that some individuals acquired their parents'

mother tongue after learning another language—mostly English or French—in childhood (16%), while others lost the ability to carry on a conversation in their first language (5%).

Once children grow up and leave their parents' home, their use of the ancestral language shows a marked decline. According to data from the 2002 EDS, only 32% of respondents used their parents' mother tongue regularly in their own home. This proportion further drops (to 20%) when examining only those who had children aged 3 to 17. And even in this last group, not all taught their children the ancestral language: just 11% of respondents reported that their youngest child could carry on a conversation in their grandparents' mother tongue. It is possible that, in some cases, parents speak the ancestral language with each other, but use English or French with their children.

Outside the home, 16% of respondents spoke the ancestral language regularly with their friends, and 12% of those in the labour market used it regularly in the workplace.



Data in this article come from the 2002 Ethnic Diversity Survey (EDS). The survey's target population consisted of persons aged 15 and over living in private households in the 10 provinces. The population did not include persons living in collective dwellings, persons living on Indian reserves, persons of Aboriginal origins living off-reserve, or persons living in Northern and remote areas.

This article focuses on the children of immigrants, that is, Canadian-born persons whose parents were both born in another country. People were only included in the analysis if neither their mother nor their father had an English or French mother tongue.

The total sample for the EDS included about 42,500 respondents aged 15 and over. Of these individuals, almost 6,800 were descendants of immigrants and among this group 4,500 reported that neither of their parents had an English or French mother tongue. This sample of 4,500 respondents, representing about 1,250,000 Canadians, provided the data for this study.

Definitions

Allophone: Individuals whose mother tongue is neither French nor English.

Respondent: Canadian-born persons aged 15 and over whose parents were both born in another country and had a mother tongue other than English or French.

Mother tongue: First language learned at home in childhood. While the vast majority of persons reported learning just one language in early childhood, a small percentage indicated that they had learned two or three languages simultaneously. These responses were retained and considered in the analysis.

Ancestral language: The parents' ancestral language is the first language learned at home by the respondent's parents. In most cases in this analysis (89%), that language was the same for both parents. For convenience, however, the expression

"parents' ancestral language" was used even when the parents did not share the same mother tongue.

Sense of cultural or ethnic belonging: In the EDS, respondents were asked the following question: "Some people have a stronger sense of belonging to some things than others. Using a scale of 1 to 5, where 1 is not strong at all and 5 is very strong, how strong is your sense of belonging to your ethnic or cultural group(s)?" This question was used to create the sense-of-belonging indicator included in the logistic regression analysis.

Language groups used in this article: Separate language groups were created when the number of respondents was large enough to allow it (more than 20 respondents). For more details on the various language groups, see the definition of "mother tongue" in the 2001 Census Dictionary.

Multivariate analysis

The statistical analysis identifies, using predicted probabilities, various characteristics associated with descendants of allophone immigrants acquiring their parents' ancestral language as their mother tongue, speaking that language, and using it regularly at home. The analysis indicates whether there is a statistically significant correlation between the various characteristics included in the model, when holding the effects of all other variables constant to their mean values. For categorical variables, like highest level of education or province of birth, the mean values represent the percentage of the population of interest falling in each of the categories of the independent variable. For example, after the parents' level of education, the respondent's age and sex, and all the other characteristics included in the statistical model have been taken into account (or held to their mean values), the predicted probability that individuals with Cantonese-speaking immigrant parents inherited Cantonese as their own mother tongue was 87%.

Some groups more likely than others to pass on their mother tongue

Not all language groups are equally likely to pass on their mother tongue to the next generation. Holding constant other variables included in a statistical model – like parents' highest level of education, respondent's age and province of

birth – respondents whose parents' mother tongue was Punjabi, Spanish, Cantonese, Korean or Greek were most likely to learn these languages as their mother tongues. Individuals with Dutch, Scandinavian, German, Tagalog, Semitic, Niger-Congo and Creole ancestral languages were least likely to do so. These differences may reflect the interest that specific

language communities have in maintaining ancestral languages. Also, levels of the parents' fluency in English or French may vary from one linguistic group to another.

Indeed, in 2001, only a small minority of immigrants whose mother tongue was Dutch, one of the Scandinavian languages, Tagalog or German was unable to

	First language learned was ancestral language	Can speak ancestral language
	Predicted probability (%)	
Ancestral language		
<i>Italian</i>	69	84
Dutch/Flemish	26*	48*
Scandinavian languages	37*	50*
Yiddish	39*	81
German	52*	65*
Portuguese	77	90
Spanish	87*	94*
Romanian	48	55*
Greek	84*	94
Armenian	68	82
Baltic languages	68	68
Russian	54	79
Croatian	84*	95
Slovenian	74	80
Czech	56	52*
Polish	75	77
Ukrainian	83*	90*
Other Slavic languages	73	80
Punjabi	89*	96*
Gujarati	72	85
Hindi	71	91
Urdu	72	83
Other Indo-Iranian languages	69	71
Dravidian languages	55	52*
Japanese	78	84
Korean	86*	84
Austro-Asiatic languages	85*	85
Arabic	63	85
Other Semitic languages	21*	51*
Tagalog	40*	50*
Other Malayo-Polynesian languages	54	57*
Finno-Ugric languages	75	70
Hungarian	63	70*
Mandarin	70	69*
Cantonese	87*	88
Other Chinese languages	80*	83
Niger-Congo languages	17	34*
Creole	10*	90
Other languages	54	55*

Note: The predicted probabilities were computed by fixing the covariables at their average value for the sample used. The results were taken from a logistic regression analysis.

Reference categories shown in *italics*.

* Statistically significant difference from reference category ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

speak either English or French;⁵ the proportion ranged from 0.2% for the Scandinavian languages to 2.0% for German. By comparison, members of other language groups were much more likely to be unable to speak either of the official languages: for example, 20% of persons with Cantonese and 15% with Punjabi mother tongue were unable to carry on a conversation in either English or French. This may reflect the varying length of time language groups have spent in Canada, and the fact that historically some have had closer contact than others with English or French. Alternatively, large concentrations of individuals in one area with the same mother tongue may render the learning of another language less essential.

Parents with same mother tongue most likely to pass language on

Respondents whose parents both had the same mother tongue (about 90% were in this situation) were more likely to learn this language as their own mother tongue (predicted probability of 68%) than persons whose parents had different mother tongues (predicted probability of 49%).⁶ This second group was more likely to speak English or French with their parents.

Parents' education also made a difference in passing on an ancestral language. For example, individuals whose mother had a postsecondary education were less likely than those whose mother's highest level of education was elementary school to have learned their parents' mother tongue as their first language: 61% versus 70%. While it is difficult to explain the exact reasons for the relationship between education and transmission of ancestral languages, other studies suggest that individuals with a higher level of education have a greater tendency to shift to the host country's official language, even for home use.⁷

The age of respondents (and, hence, indirectly the period in which they were born) was also associated with their first language learned. For example, the predicted probability that a respondent's first language was the parents' mother tongue was 52% for 15- to 24-year-olds compared with 65% for 25- to 34-year-olds and 75% for those aged 65 or over. It appears that those born earlier in the 20th century were more likely to learn the ancestral language as their mother tongue.

Finally, respondents born in Quebec were more likely to learn their parents' mother tongue as their first language than those in other provinces: 80% versus, for example, 60% in Ontario and 72% in both Saskatchewan and Alberta. In turn, the proportion with an English-only or French-only mother tongue was lower in Quebec than in other provinces. While in Ontario, 40% of respondents reported an English-only mother tongue (virtually none reported a French-only mother tongue), in Quebec, 16% had an English-only and 7% a French-only first language.

Some languages more likely to be learned later in life

In general, the factors associated with the acquisition of an ancestral language as mother tongue (such as parents' first language, parents sharing an ancestral language, parents' highest level of education, age of respondent, province of birth of respondent, etc.) are similar to those related to the ability to speak an ancestral language. Yet there are a few differences.

For example, the predicted probability that respondents whose mother tongue was Dutch/Flemish learned that language first was only 26%, while the probability that these individuals could carry on a conversation in that language later in life was 48%. Clearly, many acquired Dutch/Flemish after learning another language in childhood.

For other languages, the situation was different: they were equally likely to have been learned as mother

CST

Respondents with highly educated mothers were less likely to have an ancestral mother tongue language

	First language learned was ancestral language	Can speak ancestral language
Predicted probability (%)		
Respondent characteristics		
Both parents have the same ancestral language		
No	49	68
Yes	68*	81*
Highest level of education of the mother		
Elementary	70	82
Secondary	68	79
Some postsecondary	61	70*
Postsecondary degree or diploma	61*	77
Highest level of education of the father		
Elementary	67	79
Secondary	63	82
Some postsecondary	75	81
Postsecondary degree or diploma	63	81

Note: The predicted probabilities were computed by fixing the covariables at their average value for the sample used. The results were taken from a logistic regression analysis.
Reference categories shown in *italics*.

* Statistically significant difference from reference category ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

CST

Compared with other provinces, the predicted probability of learning an ancestral language was highest in Quebec

	First language learned was ancestral language	Can speak ancestral language
Predicted probability (%)		
Respondent characteristics		
Age		
15-24	52	79
25-34	65*	81
35-44	71*	83
45-64	70*	75
65 and over	75*	75
Sex		
Men	62*	78
Women	69	80
Province of birth		
Atlantic	74	91
Quebec	80*	90*
Ontario	60	76
Manitoba	68	80
Saskatchewan	72*	78
Alberta	72*	82*
British Columbia	61	73

Note: The predicted probabilities were computed by fixing the covariables at their average value for the sample used. The results were taken from a logistic regression analysis.
Reference categories shown in *italics*.

* Statistically significant difference from reference category ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

Ancestral language	Regularly used ancestral language at home	Ancestral language	Regularly used ancestral language at home
	Predicted probability (%)		Predicted probability (%)
<i>Italian</i>	35	Hindi	31
Dutch/Flemish	19	Urdu	36
Scandinavian languages	0*	Other Indo-Iranian languages	36
Yiddish	13	Dravidian languages	14
German	22*	Japanese	43
Portuguese	37	Korean	52
Spanish	36	Austro-Asiatic languages	61
Romanian	7	Arabic	58*
Greek	52*	Other Semitic languages	9
Armenian	23	Tagalog	14*
Baltic languages	53	Other Malayo-Polynesian languages	47
Russian	55	Finno-Ugric languages	55
Croatian	42	Hungarian	44
Slovenian	16	Mandarin	40
Czech	60	Cantonese	44
Polish	40	Other Chinese languages	26
Ukrainian	57*	Niger-Congo languages	36
Other Slavic languages	57	Creole	17
Punjabi	45	Other languages	17
Gujarati	16		

Note: The predicted probabilities were computed by fixing the covariables at their average value for the sample used. The results were taken from a logistic regression analysis. Reference group shown in *italics*.

* Statistically significant difference from reference group ($p < 0.05$)

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

tongue and still spoken at the time of the survey. For example, the predicted probability that respondents whose parents' mother tongue was Mandarin learned that language first in childhood was 70%, virtually identical to the probability that they could still speak that language (69%).

In contrast to the findings with respect to mother tongue, no significant correlation appeared between age and the probability of carrying on a conversation in the parents' ancestral language. The youngest individuals had just as high a probability as the oldest of being able to carry on a conversation in their parents' first language.

Regular use key to maintaining ancestral language

The real key to preserving ancestral languages between generations

is using them in everyday life. Speaking these languages at home is particularly important, since passing them on to children depends, in most case, on home use.⁸ Although nearly three-quarters of respondents spoke their parents' mother tongue well enough to carry on a conversation, not all of them used that language regularly in their own home.

Not surprisingly, respondents whose mother tongue was the ancestral language were more likely than others to continue to use that language: 39% used it in their home, compared with 19% of those whose mother tongue was different from that of their parents. In addition, individuals who, up to age 15, most often spoke the ancestral language with their parents were more likely to speak that language in their own home (predicted probability of 42%,

compared with 20% for those who had not spoken with their parents).

One of the most important factors associated with speaking the ancestral language in the home is the presence of at least one immigrant parent. Respondents who lived in the same household as their parents were much more likely to use the ancestral language regularly at home than those who did not live with their parents (predicted probabilities of 65% and 20% respectively). In other words, only one in five of those who had left the family nest used the ancestral language regularly in their own home.

The presence of a spouse who speaks the ancestral language is also strongly associated with the use of that language. The predicted probability that respondents would regularly speak the ancestral language

Respondent characteristics	Regularly used ancestral language at home	Respondent characteristics	Regularly used ancestral language at home
	%		%
Mother tongue is ancestral language		Household income	
No	19	Up to \$19,999	51
Yes	39*	\$20,000-\$39,999	50
Spoke the ancestral language most of the time with parents before age 15		\$40,000-\$59,999	32*
No	20	\$60,000-\$99,999	30*
Yes	42*	\$100,000 and over	27*
Both parents had same ancestral language		Highest level of education completed	
No	28	Elementary	31
Yes	34	Secondary	30
Age		College	40
15-24	48	University	35
25-34	39	Have a child under age 18	
35-44	36	No	34
45-64	21*	Yes	34
65 and over	14*	Spouse speaks the ancestral language	
Sex		No	18
Men	32	Yes	58*
Women	35	No spouse	37*
Province of birth		Lives with parents	
Atlantic	8*	No	20
Quebec	52*	Yes	65*
Ontario	31	Level of ethnic/cultural belonging	
Manitoba	35	Not strong at all	8
Saskatchewan	32	Score of 2	19*
Alberta	28	Score of 3	31*
British Columbia	29	Score of 4	41*
		Very strong	44*

Note: The predicted probabilities were computed by fixing the covariables at their average value for the sample used. The results were taken from a logistic regression analysis. Reference group shown in *italics*.

* Statistically significant difference from reference group ($p < 0.05$)

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

at home was 58% when their spouse also spoke that language but only 18% when their spouse did not. In most cases, when a spouse does not speak the ancestral language, the couple switches to English or French.

Income level and sense of belonging to one's cultural or ethnic group are also strongly correlated with the regular use of the parents' mother tongue at home. First, respondents with higher incomes had a lower probability of using their parents' ancestral language at home

than those with lower incomes: 51% of individuals with household incomes of \$20,000 or less used the ancestral language, compared with 27% of those with household incomes above \$100,000. Second, the greater the sense of belonging to one's cultural or ethnic group, the higher was the probability of using the ancestral language at home. Not surprisingly, since language is likely one dimension of a sense of belonging, this correlation was one of the strongest found in this analysis. Respondents who

reported a "very strong" sense of belonging were much more likely to use their ancestral language at home (predicted probability of 44%) than those whose sense of attachment was "not strong at all" (8%). It is, however, not possible to establish a cause-and-effect relationship between the two phenomena, since using an ancestral language may, in turn, strengthen one's sense of belonging.

Summary

Preserving an ancestral language is a challenge for many linguistic minority communities. This study focused on Canadian-born individuals whose parents were both born in another country and had a language other than English or French as their mother tongue.

Just under one-third of respondents used their parents' mother tongue at home on a regular basis. The percentage of those who used the ancestral language with friends was even smaller. A multivariate analysis showed that for those who no longer lived with their parents, the probability of speaking the ancestral language regularly at home was only 20%. This situation seems to suggest that, in most cases, the ancestral language will not be transmitted to the next generation.

Respondents with the highest probability of regularly using their parents' ancestral language at home are the ones who acquired the language as their mother tongue and who, up to the age of 15, spoke it with their parents most of the time; those with a lower income; those born in Quebec; those married to or living with someone who also knows the ancestral language; those living with their parents; and those with a strong sense of ethnic or cultural belonging.


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3. Alba, R., J. Logan, A. Lutz and B. Stults. 2002. "Only English by the third generation? Loss and preservation of the mother tongue among the grandchildren of contemporary immigrants." *Demography* 39, 3: 467-484.
4. Alba et al.; Stevens, G. 1992. "The social and demographic context of language use in the United States." *American Sociological Review* 57: 171-185.
5. Only single responses are considered. A small percentage of individuals reported having learned two languages at the same time at home in childhood. They are not included in the figures presented here.
6. This result is consistent with the findings of several previous studies. See, for example, G. Stevens. 1985. "Nativity, intermarriage, and mother-tongue shift." *American Sociological Review* 50: 74-83; Harrison, B. Autumn 2000. "Passing on the language: Heritage language diversity in Canada." *Canadian Social Trends*.
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8. Alba et al, 2002.



SOCIAL INDICATORS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
INCOME¹										
<i>Average market income</i>										
Economic families ²	56,300	56,300	57,800	60,400	62,300	65,100	65,800	65,600	64,900	..
Unattached individuals	21,000	20,500	20,400	21,200	23,300	23,400	24,100	24,600	25,600	..
<i>Average total income (includes transfer payments)</i>										
Economic families ²	64,300	64,600	66,000	68,400	69,900	72,500	73,600	73,400	72,700	..
Unattached individuals	27,100	26,500	26,400	27,100	28,800	28,800	29,600	30,200	30,900	..
<i>Average income tax</i>										
Economic families ²	12,800	12,700	13,100	13,800	13,600	14,400	13,200	13,000	12,800	..
Unattached individuals	4,800	4,600	4,500	4,800	5,300	5,200	4,800	4,900	5,300	..
<i>Average after-tax income</i>										
Economic families ²	51,600	51,900	52,900	54,700	56,300	58,100	60,400	60,400	59,900	..
Unattached individuals	22,300	21,900	21,900	22,300	23,500	23,600	24,700	25,300	25,600	..
<i>Average after-tax income by quintiles for families</i>										
Lowest quintile	19,500	18,700	18,600	19,200	20,100	20,100	21,600	21,100	21,500	..
2 nd	33,800	33,200	33,400	34,500	36,100	36,500	37,900	37,800	37,700	..
3 rd	46,100	46,400	46,600	48,000	49,600	50,400	52,300	52,300	52,300	..
4 th	60,900	61,600	62,500	64,400	66,200	67,700	69,900	70,500	69,800	..
Highest quintile	97,500	99,600	103,400	107,500	109,600	115,600	120,400	120,600	118,100	..
<i>Earnings ratios (full-year, full-time workers)</i>										
Dual-earners as % of										
husband-wife families	58.7	59	60.8	60.9	62.1	63.0	63.7	63.6	64.8	..
Women's earnings as % of men's	73.0	72.8	69.2	72.1	69.4	71.7	71.0	71.3	..	..
<i>Prevalence (%) of low income after tax (1992 low income cut-offs)</i>										
Families with head aged 65 and over	2.4	3.3	3.9	3.9	2.9	3.1	2.5	2.9	2.7	..
Families with head less than 65	12.6	13.5	12.7	11.1	10.6	10.0	8.8	9.5	9.3	..
Two-parent families with children	10.7	10.8	10.3	8.5	8.1	8.3	6.9	6.5	6.6	..
Lone-parent families	45.0	48.9	45.4	39.0	36.1	32.3	30.1	34.2	33.6	..
Unattached individuals	35.0	37.3	37.9	35.1	34.0	32.9	30.8	29.5	29.4	..
FAMILIES										
Marriage rate (per 1,000 population)	5.5	5.3	5.1	5.1	5.1	5.1	4.7	4.7	4.6	..
Crude divorce rate										
(per 1,000 population)	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	..
Total number of families ('000) ^{3,4}	7,876	7,975	8,076	8,176	8,279	8,380	8,481	8,566	8,633	8,702
<i>% of all families</i>										
Husband-wife families	85.8	85.5	85.3	85.0	84.8	84.5	84.3	84.3	84.3	84.3
with children	50.9	50.6	50.1	49.5	49.0	48.5	47.9	48.0	48.0	48.0
without children	34.9	34.9	35.2	35.5	35.8	36.1	36.3	36.3	36.3	36.3
Lone-parent families	14.2	14.5	14.7	15.0	15.2	15.5	15.7	15.7	15.7	15.7
<i>% of husband-wife families</i>										
with children	59.3	59.2	58.8	58.2	57.8	59.3	56.9	56.9	56.9	56.9
all children under 18	65.8	65.4	65.0	64.7	64.3	63.9	63.5	63.5	63.5	63.5
Females as % of lone-parent families	83.0	83.1	82.7	82.3	82.0	81.6	81.3	81.3	81.3	81.3

.. Data not available for a specific reference period.

1. All incomes are in 2003 constant dollars.

2. An economic family consists of two or more people who live in the same dwelling and are related by blood, marriage, common-law or adoption.

3. A census family is referred to as immediate or nuclear family consisting of married or common-law couples with or without children, or lone parents and their children, whereas a child does not have his or her own spouse residing in the household.

4. Excluding the territories.

Sources: *Income in Canada* (Catalogue no. 75-202-XPE), *Income Trends in Canada* (Catalogue no. 13F0022-XCB), *Annual Demographic Statistics* (Catalogue no. 91-213-XPB) and *Divorces* (Catalogue no. 84F0213-XPB).



LESSON PLAN

Suggestions for using *Canadian Social Trends* in the classroom

"Young adults who give and receive help"

Objectives

- To understand how young adults view and experience helping behaviour.
- To consider the social impact of giving and receiving help.

Classroom instructions

1. Engage your students in a discussion of what it means to give help. Ask them to provide examples of the ways that individuals help others, even in situations when they may not realize they are providing assistance. Are small acts of kindness any less valuable than acts that occur on a grand scale (e.g., helping a neighbourhood child with homework versus donating one million dollars to charity)? How might a single act of helping have a broad social impact?
2. Ask your class what they believe motivates someone to help another person? How might helping someone else be a gift to the giver as well as the receiver? Speculate on some of the reasons why young people are more likely than older persons to both give and receive assistance.
3. Have your students examine whether they would find it easier to give help to, or receive it from, a friend, family member, neighbour or complete stranger. Why? What specific types of aid might be exchanged with these different individuals?
4. Ask your students if they think that seeking help for a problem is viewed as a sign of weakness. Are some types of help more socially acceptable than others? Why might it be important to be able to receive help from others when it's needed?
5. Examine whether it is ever inappropriate to give or receive help. Consider possible negative consequences that could arise from providing or receiving help in certain situations, even when the help providers have good intentions. (E.g., financially or emotionally supporting someone with a destructive behaviour such as using drugs, or parents who always try to solve their children's problems rather than allowing the children to resolve them).
6. Explore with the students the circumstances under which help is expected. What is the difference between help and obligation? Does helping behaviour always have a voluntary component? Do individuals have a social responsibility to help others?
7. Have your students consider why certain events, such as natural disasters, spawn immediate huge outpourings of support, yet it is more difficult to maintain the public's attention on ongoing social problems, e.g., poverty, illnesses, both at a national and international level. Do the media have a role in keeping these issues in the public eye or in encouraging individuals to become involved?

Using other resources

See the Civics and Society kit at <http://www.statcan.ca/english/kits/issues/issue1.htm>

See the Volunteering lesson plan at <http://www.statcan.ca/english/kits/social/volun1.htm>

Educators

You may photocopy "Lesson plan" or any item or article in *Canadian Social Trends* for use in your classroom.

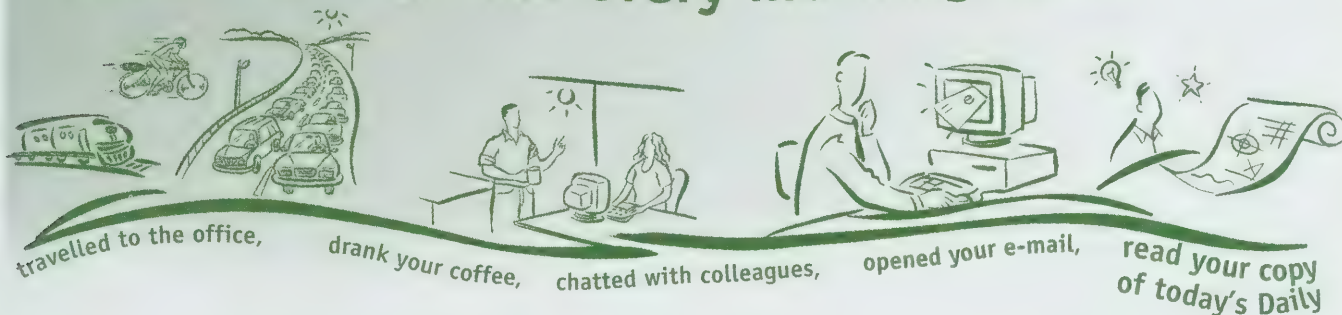
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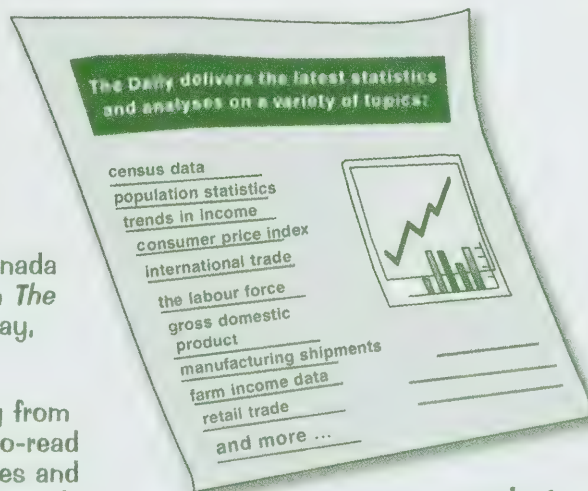


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Control of life

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The end of marriage

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Who's religious?

by Warren Clark and Grant Schellenberg

There has been much debate about whether Canada is becoming increasingly secularized. Many argue that institutional religion has a reduced influence on Canadian society. Certainly, religious attendance rates between the late 1940s and late 1990s have declined significantly while the percentage of people reporting no religious affiliation has increased. But does this imply that there is an erosion of individual faith, based on the supposition that attendance rates decrease because people lack the belief that motivates attendance? Well-known social researcher Reginald Bibby asserts that others have been wrong in predicting the demise of religion in Canada because people continue to have spiritual needs.¹

This article uses data from the General Social Survey (GSS) and the 2002 Ethnic Diversity Survey (EDS) to track the religious views and practices of Canadians and identify those groups most likely to be religious. An index of religiosity is developed based on the presence of religious affiliation, frequency of attendance at religious services, frequency of private religious practices and the importance of religion to the respondent.

The decline in religious affiliation and attendance

Since the mid-1980s, Statistics Canada's General Social Survey (GSS) has provided insights into Canadians' public religious behaviour by asking

about their religious affiliation² and frequency of attendance at religious services, the first two dimensions of religiosity considered in this article. There have been noticeable declines in these measures over the past twenty years.

Between 1985 and 2004, the share of Canadians aged 15 and older reporting no religious affiliation increased by seven percentage points from 12% to 19%.³ In addition, a growing share of Canadians had not attended any religious services in the previous year, even though they reported an affiliation (19% to 25%). Together, the proportion of adult Canadians who either have no religious affiliation or do have a religion but don't attend religious services increased from 31% to 43% over this period.

This upward trend was evident among all age groups and in all regions of the country, although young people and British Columbians were most likely to have weak ties with religious organizations. Indeed, in 2004 over half of Canadians aged 15 to 29 and almost 60% of British Columbians either had no religious affiliation or did not attend any religious services.

Since 1985, a widening divergence in the public religious behaviours of immigrants and persons born in Canada has also emerged. The percentage of Canadian-born 15 to 59-year-olds with no religious affiliation or not attending religious services has increased from 33% in 1985 to 48% in 2004. In contrast, immigrants in this age group have changed very little, from 36% to 35%.⁴ All in all, public

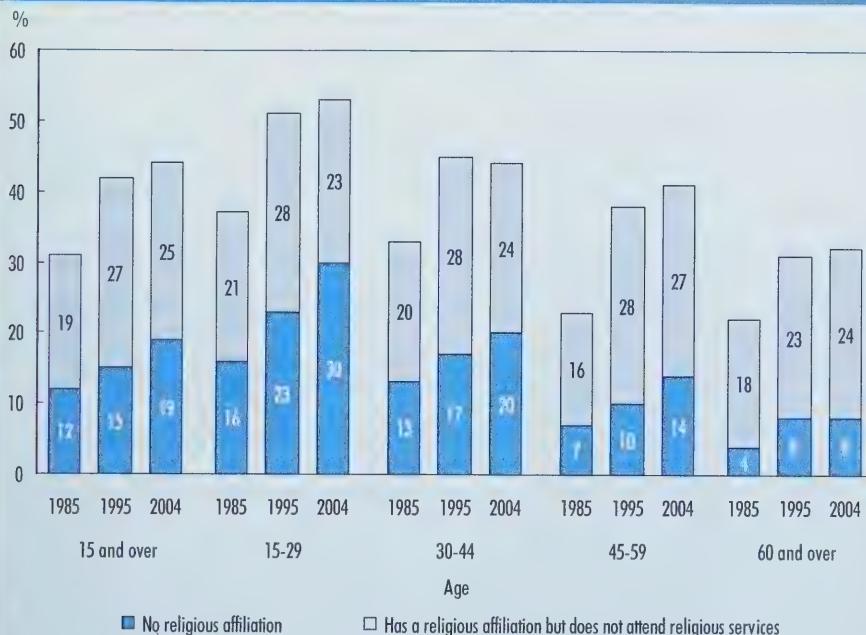
GST Religious affiliation and attendance among Canadians aged 15 and older

	1985	1990	1995	2000	2004	% point change 1985-2004
	%					
Population aged 15 & over	100	100	100	100	100	...
No religious affiliation	12	12	15	20	19	7
Frequency of attendance						
Not in the last 12 months	19	23	27	21	25	5
Infrequently ¹	28	28	24	28	25	-3
At least monthly	41	37	33	31	32	-9

... not applicable

1. Attended religious services, but only a few times a year or less frequently.

Source: Statistics Canada, General Social Survey.



Source: Statistics Canada, General Social Survey.

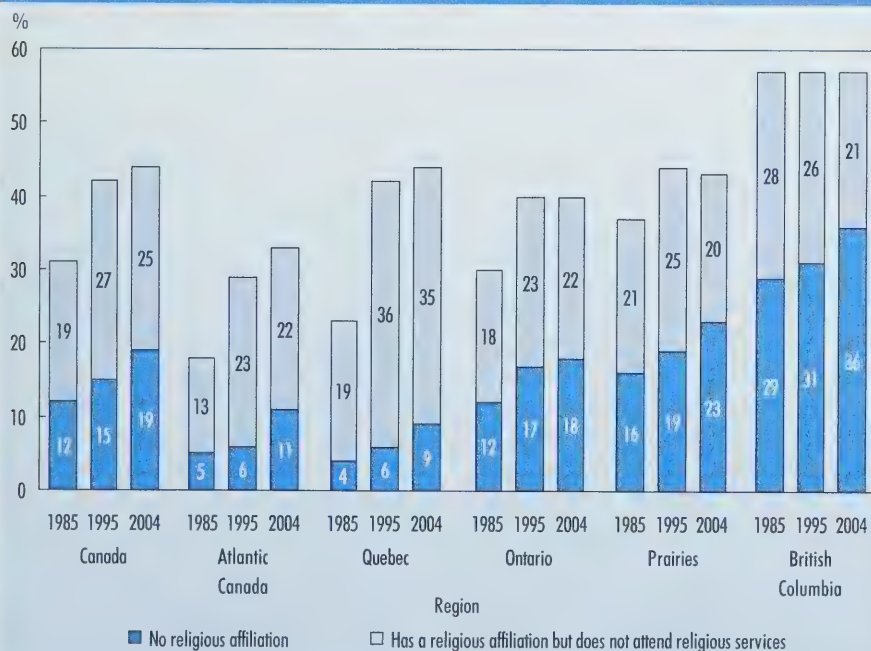
religious behaviours among persons born inside and outside Canada became more dissimilar, although this divergence conceals considerable diversity in levels of religiosity among immigrants from different regions of the world.

Half of adult Canadians regularly engage in religious activities on their own

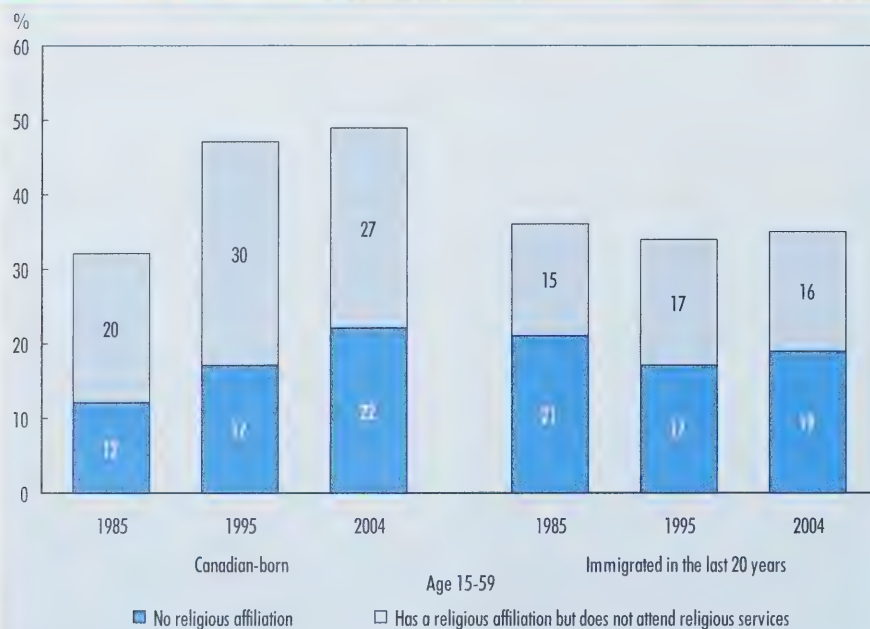
Public religious behaviour, religious affiliation and attendance, have been declining among much of the population, but this captures only one aspect of peoples' religiosity. To get a more complete picture, private religious behaviour such as prayer, meditation, worship and reading of sacred texts on one's own is examined.⁵ Although some Canadians have little or no connection with religious organizations, the 2002 EDS shows that they do engage in such private religious behaviour either at home or in other locations.

While only about one-third (32%) of adult Canadians attend religious services at least monthly, over one-half (53%) engage in religious activities on their own at least monthly. Eleven percent engage in religious activities on their own a few times a year, while 18% never engage in such activities. Those who said they have no religious affiliation (17%) were not asked this question on the EDS.

As with religious attendance, the likelihood of engaging in religious activities on one's own was more prevalent in older age groups. Similarly, individuals in the Atlantic region were most likely to engage in such practices while individuals in British Columbia were least likely to do so. Immigrants were more likely to engage in such activities than persons born in Canada.



Source: Statistics Canada, General Social Survey.



Source: Statistics Canada, General Social Survey.

Not surprisingly, individuals who frequently attended religious services were also most likely to regularly engage in personal religious practices. In fact, 75% of Canadians who attended religious services at least monthly also engaged in religious practices on their own on a weekly basis.

Perhaps most striking is the many Canadians who infrequently or never attend services yet regularly engage in personal religious practices. Of those who infrequently attended religious services over the previous year, 37% engaged in religious practices on their own on a weekly basis. And of those who had not attended any religious services over the previous year, 27% engaged in weekly religious practices on their own. Overall this group of adults who regularly engage in private religious practices, but infrequently or never attend religious services, represent 21% of the adult population.

This pattern was most prevalent among older Canadians. Among Canadian adults who never attended

religious services, 45% of those aged 60 or older engaged in personal religious activities compared with 27% of those aged 15 to 29. Religious attendance is prevalent among people in their 60s but declines as age advances because of factors such as illness, disability and access to transportation. But despite these barriers to attendance, seniors retain their religious attitudes and beliefs and continue to engage in private religious practices.⁶

Is my religion important?

Going beyond public and private religious practices to measure religiosity, a fourth dimension can be added reflecting the level of importance that religion has in peoples' lives. Overall, 44% of Canadians place a high degree of importance on religion in their life.⁷ Again, this is associated with age, region of residence, immigration status and the frequency of public and private religious practices.

Almost half (45%) of those Canadian adults who do not regularly

attend services but who engage in religious activities on their own at least once a month place a high degree of importance on their religion. This suggests that more Canadian adults attach a high degree of importance to religion than attendance figures alone would indicate. Not surprisingly, individuals who regularly attend services and engage in personal religious practices are most likely to place high importance on religion (87%). In contrast, only 15% of those who infrequently or never participate in public or private religious practices place high importance on religion.

Religiosity index

Finally, the four dimensions of religiosity – affiliation, attendance, personal practices and importance of religion – can be combined into a simple additive 'religiosity index'.^{8,9} People may attend religious services or choose religious denominations to please their loved ones, so an index which also captures the importance of religion and personal religious practices may be a better indicator of religiosity.

Individuals with no religious affiliation were assigned a score of 0, while those with an affiliation received a score ranging from 1 to 13. A score of 1 indicates that the person does not attend religious services, does not engage in religious practices on their own, and places no importance on religion. A score of 13 indicates that the person attends religious services at least once a week, engages in personal religious practices at least once a week, and places a great deal of importance on religion. To simplify the analysis of religiosity, Canadians were grouped into three broad categories based on their religiosity index, low (0-5), moderate (6-10) and high (11-13). The group with 'low religiosity' includes persons with no religious affiliation.

Based on these criteria, 40% of Canadians have a low degree of religiosity, 31% are moderately religious and 29% are highly religious.

	Frequency of religious practices on one's own					Total
	Weekly	Monthly	A few times a year ¹	Not in past 12 months	No religion	
	%					
Total	43	11	11	18	17	100
Men	34*	10	13*	23*	20*	100
Women	51	11	10	14	15	100
Age						
15 to 29	32*	12	12	19	25*	100
30 to 44	39	11	12	19	19	100
45 to 59	44*	10*	11	19	15*	100
60 or older	58*	9*	8*	17	9*	100
Region of residence						
Atlantic	48	13	13	19	8*	100
Quebec	43	11	14	24*	7*	100
Ontario	44	11	10	17	17	100
Prairies	41	11	10	16	22*	100
British Columbia	35*	8*	8	14*	36*	100
Immigration Status						
Canadian-Born	40	11	12	20	17	100
Immigrated before 1982	51*	8*	8*	17*	16	100
Immigrated in 1982-2001	50*	9*	8*	12*	21*	100
Frequency of attendance at religious services or meetings						
At least monthly	75	13	5	6	...	100
Infrequently	37*	17*	25*	21*	...	100
Not in last 12 months	27*	8*	13*	51*	...	100
No religious affiliation	...	...	...	...	100	100

1. Attend religious services, but only a few times a year or less frequently.

* Statistically significant difference from reference group in italic ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

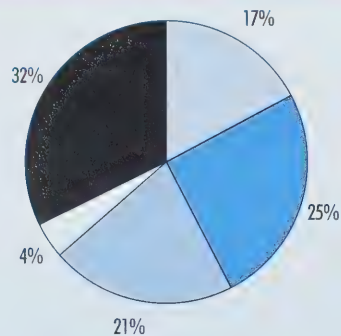
Again, religiosity is lowest among young people and higher among individuals in older age groups. Men are also much more likely to have low religiosity than women. Across the country, low levels of religiosity are most prevalent in British Columbia. One might guess that the prevalence of Chinese visible minorities in British Columbia may contribute to the British Columbia's low level of religiosity since levels of religiosity (as measured here) are low among this group and they comprise a larger share of British Columbia's population

than other provinces. They do in part, but by far the greatest contributor is the low religiosity among non-visible minorities in British Columbia. Non-visible minorities in British Columbia are one and half times as likely as non-visible minorities in Ontario to have low religiosity (57% versus 38%).

The degree of religiosity expressed by Canadians is associated with the religious background of their parents. Of those who say that neither of their parents had a religion, 85% have a low degree of religiosity and 10% have

a high degree. In contrast, of those who say that both of their parents had similar religious backgrounds, 32% have a low degree of religiosity and 33% have a high degree. This is consistent with other studies that show religious parents are most likely to pass their religion on to their children and this occurs most often when both parents have similar religious backgrounds.¹⁰

About four in ten (41%) of the immigrants who arrived in Canada between 1982 and 2001 have a high degree of religiosity, compared with



- No religion
- Regular public practice only³
- Infrequent public and private practice¹
- Regular private practice only²
- Regular public and private practice⁴

1. Infrequent public and private practice - infrequently or never attends religious services or does religious practices on their own.
 2. Regular private practice only - infrequently or never attends religious services, but does religious practices on their own at least once a month.
 3. Regular public practice only - attends religious services at least once a month, but does religious practices on their own infrequently or never.
 4. Regular public and private practice - attends religious services and does religious practices on their own at least once a month.
- Source: Statistics Canada, Ethnic Diversity Survey, 2002.

26% of persons born in Canada. However, there is considerable variation in levels of religiosity among immigrants from different regions of the world. High levels of religiosity are most prevalent among immigrants from South Asia (e.g. India and Pakistan), South East Asia (e.g. the Philippines) and the Caribbean and Central and South America. In contrast, high levels of religiosity are least prevalent among immigrants from East Asia (e.g. China and Japan) and Western/Northern Europe (e.g. France and the United Kingdom) and Eastern Europe (e.g. Hungary).

Summary

The last several decades have witnessed an increasing share of the population reporting no religion and a decreasing share reporting monthly or weekly attendance at religious services. However, declining attendance may overstate the extent to which Canada is becoming

Importance of religion to you¹

	High	Moderate	Low	No religion	Total
--	------	----------	-----	-------------	-------

%

Total	44	20	19	17	100
Men	36*	21	23*	20*	100
Women	51	20	14	15	100

Age

15 to 29	34*	20*	22	25*	100
30 to 44	39	23	20	19	100
45 to 59	43*	22	20	15*	100
60+	62*	16*	13*	9*	100

Region of residence

Atlantic	54*	22	17	8*	100
Quebec	41*	26*	26*	7*	100
Ontario	47	19	16	17	100
Prairies	42*	19	17	22*	100
British Columbia	34*	15*	15	36*	100

Importance of religion to you¹

	High	Moderate	Low	No religion	Total
--	------	----------	-----	-------------	-------

%

Immigration Status

Canadian-born	40	22	21	17	100
Immigrated before 1982	55*	15*	15*	16	100
Immigrated in 1982 to 2001	57*	12*	10*	21*	100

Religious practices

Attendance at religious services	Private religious practices	High	Moderate	Low	No religion	Total
At least monthly	At least monthly	87	11	2	...	100
At least monthly	Infrequently or never	60*	27*	12*	...	100
Infrequently or never	At least monthly	45*	36*	18*	...	100
Infrequently or never	Infrequently or never	15*	31*	54*	...	100
No religion		...	...	...	100	100

1. Importance of religion to you is scored from 1 (not important at all) to 5 (very important). High importance is defined as a score of four or five, moderate importance — a score of three and low importance — a score of one or two. Those reporting no religious affiliation were not asked this question.

* Statistically significant difference from reference group in italic ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

Degree of religiosity

	Low (0-5)	Moderate (6-10)	High (11-13)	Total
	%			
Total	40	31	29	100
Men	48*	28*	24*	100
Women	32	33	35	100
Age				
15 to 29	48*	30*	22*	100
30 to 44	43	32	25	100
45 to 59	39*	31	30*	100
60+	26*	30*	44*	100
Region of residence				
Atlantic	29*	35*	36	100
Quebec	39*	37*	24*	100
Ontario	37	30	33	100
Prairies	42*	28*	31	100
British Columbia	54*	22*	25*	100
Immigration Status				
Canadian-born	41	32	26	100
Immigrated before 1982	33*	27*	40*	100
Immigrated 1982 to 2001	34*	25*	41*	100
Religion of parents				
Both parents same religion	32	34	33	100
Parents from different religions	50*	28*	22*	100
Neither parent religious	85*	6*	10*	100

* Statistically significant difference from reference group in italic ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

secularized, since a considerable proportion of Canadians do not attend religious services but do engage in religious practices on their own. Similarly, some Canadians who do not attend services still attach a high degree of importance to religion in their life. This suggests that while attendance rates have declined, many Canadians continue to practice their religion in private.

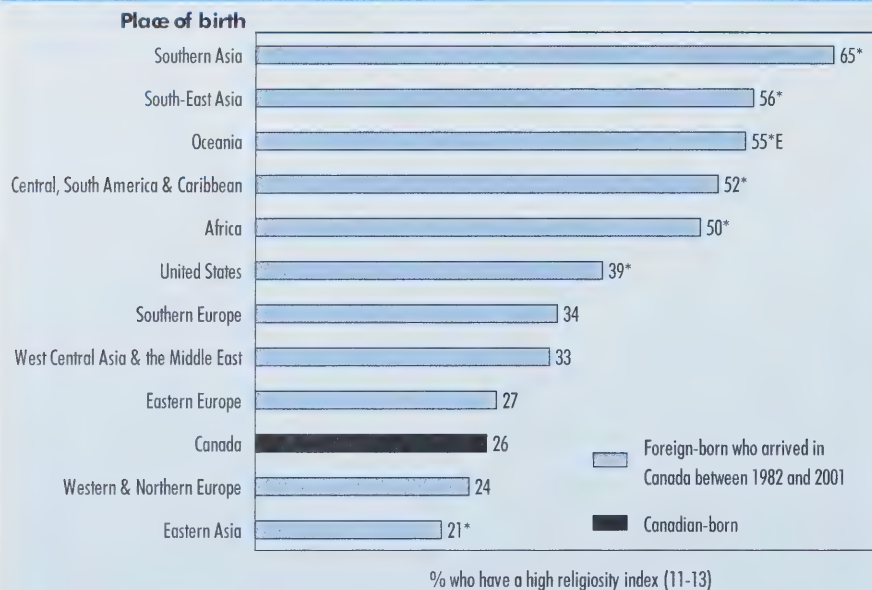
Consistent with previous studies, young adults are the group with the weakest attachment to organized religion. However, even when other forms of religious behaviour are considered, almost half of Canadians aged 15 to 29 still have a low degree of religiosity. Similarly, most individuals in British Columbia exhibit a low level of religiosity whether this is measured in terms of attendance,

personal practices or importance attached to religion. There also appears to be a wide variation in religiosity of immigrants associated with the religious traditions of their country of birth, which may differ substantially from persons born in Canada.

CST

Grant Schellenberg and **Warren Clark** are senior analysts with Social and Aboriginal Statistics Division, Statistics Canada.

1. Bibby, Reginald W. 2002. "Restless Gods — The renaissance of religion in Canada" Toronto: Stoddart Publishing, pp. 58-59.
2. For example: Catholic, Anglican, Lutheran, Jewish, Muslim or Buddhist.
3. The Census indicates 4% in 1971, 7% in 1981, 12% in 1991 and 16% in 2001 of the population aged 15 and over reported no religious affiliation.
4. This comparison is limited to immigrants who arrived in Canada during the 20-year period from 1982 to 2001.
5. Cornwall, Marie et al. 1986. "The dimension of religiosity: A conceptual model and an empirical test." Review of Religious Research, Vol. 27, No. 3, pp. 226-244.
6. Broyles, Phillip A., & Cynthia K. Drenovsky. 1992. "Religious attendance and the subjective health of the elderly." Review of Religious Research, Vol. 34, No. 2, pp. 152-160.
7. A high degree of importance is defined as a score of 4 or 5 on a 5 point scale where 1 means "not important at all" and 5 means "very important." Individuals who did not have a religious affiliation were not asked this question.



E High sampling variability. Use with caution.

* Statistically significant difference from estimate for Canadian-born ($p < 0.05$).

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

8. The religiosity index is obtained by adding a score from each of the groups in the following table (dimensions of religiosity). Those with no religious affiliation were not asked about the other dimensions of religiosity and therefore have a religiosity index of "0". For example, the religiosity index for someone who has a religion (add 1), does not attend religious services at all (add 0), who does personal religious practices on their own at least once a month (add 3) and considers religion to be at an importance level of 1 (add 1) would have a religiosity index of $1+0+3+1=5$, in the low range of the religiosity index.

Religious affiliation

No affiliation (0)
Has a religion (1)

Religious attendance

Not at all (0)
Once or twice a year (1)
At least 3 times a year (2)
At least once a month (3)
At least once a week (4)

Frequency of religious

Not at all (0)
Once or twice a year (1)
At least 3 times a year (2)
At least once a month (3)
At least once a week (4)

Importance of practices on your own religion to one's life

Not important at all (0)
(1)
(2)
(3)
Very important (4)

9. The giving of time and money to religious organizations were not collected by the EDS, but may also be important dimensions of religiosity.
10. Bibby, Reginald W. 1997. "The persistence of Christian religious identification in Canada" *Canadian Social Trends*, No. 44, Spring 1997. pp. 24-28.
- Sherkat, Darren E., Christopher G. Ellison. 1999. "Recent developments and current controversies in the sociology of religion" *Annual Review of Sociology*, Vol. 25, No. 1, pp. 363-394.

GST What you should know about this study

Almost every year since 1985, Statistics Canada's General Social Survey (GSS) has interviewed adults aged 15 and over living in private households in the 10 provinces. The GSS has collected information about religious affiliation and the frequency of attendance at religious services (excluding special occasions such as weddings, funerals and baptisms). This article uses GSS data to identify trends in adult religious attendance rates and in the percentage of the adult population that has no religion.

Prior to 2003, GSS respondents who indicated they had a religion were asked how frequently they attended religious services. Beginning in 2003, GSS respondents who had a religion were asked how important their religious or spiritual beliefs were to the way they lived their lives. Those who indicated that religious beliefs were not at all important were not asked about their frequency of attendance at religious services in order to reduce response burden. In theory, this implies that pre- and post-2003 religious attendance rates are different, but a comparison of the rates for 2003 and 2004 with those in 2000 and 2001 shows very little difference, suggesting that the impact of the question changes is minimal.

Respondents to the 2002 Ethnic Diversity Survey (EDS)¹ were also asked: "In the past 12 months, how often did you do religious activities on your own? This may include prayer, meditation and other forms of worship taking place at home or in any other location." Information was not collected on individuals' specific beliefs or on the specific types of religious activities in which they engage.² Respondents were also asked: "Using a scale of 1 to 5, where 1 is not important at all and 5 is very important, how important is your religion to you? Again, 1 is not important at all and 5 is very important." Those who reported they had no religion were not asked about their religious practices on their own or about the importance of religion to them, presumably because they would not engage in religious practices or view religion as important to them. However, this does not imply that those with no religious affiliation are not interested in spiritual issues or may not be keenly interested in spiritual growth and spiritual philosophies.

1. The 2002 Ethnic Diversity Survey surveyed the non-Aboriginal population aged 15 and over only.
2. General Social Survey (GSS) and Ethnic Diversity Survey (EDS) questions on the frequency of religious attendance are worded differently. GSS respondents are asked "Other than on special occasions, (such as weddings, funerals or baptisms) how often did you attend religious services or meetings in the last 12 months?" EDS respondents were asked "In the past 12 months, how often did you participate in religious activities or attend religious services or meetings with other people, other than for events such as weddings and funerals?" In short, EDS respondents are asked about a somewhat broader range of religious activities (i.e. religious activities or religious services/meetings) than GSS respondents. Consequently, the EDS yields a slightly larger share of Canadians who attend services/meetings on a monthly basis (37% versus 31%).

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Taking charge: Perceptions of control over life chances

by Anne Milan

Most people have moments when they feel that their lives are going along as planned, while at other times nothing seems to go right. In these situations, they might feel in complete command of the paths they follow, and view their achievements – or even their failures – as the result of their own efforts and abilities. Alternatively, they might feel that certain aspects of life are beyond their control, and that fate, destiny, luck or a higher power play an important role in how their lives unfold.

The concept of mastery refers to an individual's perception that she has control over her own life. A person's response to events can be influenced by many factors that affect his assessment of his own role in society as well as his future outcomes. Of course, there are larger situations at the national or international level which are beyond the realm of individual control, such as business cycles in the economy or natural disasters. However, people with high levels of perceived control are "effective forces in their own lives"¹, and are likely "to accumulate resources and to develop skills and habits that prevent avoidable problems and reduce the impact of unavoidable problems."² This, in turn, can produce a reciprocal effect between achievements and sense of mastery over life chances which could influence many areas of a person's life.

GST What you should know about this study

Using the 2003 General Social Survey (GSS), this paper examines the extent of perceptions of control over life chances for individuals aged 15 and over. The results are based on a sample of about 22,600 people representing over 23 million Canadians.

Sense of mastery was determined by asking respondents if they strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree that:

- they have little control over the things that happen to them;
- there is really no way they can solve some of the problems they have;
- there is little they can do to change many of the important things in their lives;
- they often feel helpless in dealing with problems of life;
- sometimes they feel that they are being pushed around in life;
- what happens to them in the future mostly depends on them;
- they can do just about anything they really set their mind to.

These factors were then combined to form a mastery scale,¹ ranging in value from 0 to 28, which measures the extent to which individuals believe that their lives are under their own control. Higher scores indicate a greater sense of mastery.

Readers should note that it is not possible to identify the realms in which respondents felt they controlled their lives. Perceptions of control could be context-specific in that people might feel in control of certain areas of their lives, but not others. For example, someone might feel powerless when faced with a health problem, but still believe that they can achieve their desired education, marriage or family goals.

Life satisfaction was measured as respondents' satisfaction with their lives as a whole on a ten-point scale ranging from a score of 0 ("very dissatisfied") to 10 ("very satisfied").

A statistical model was developed in order to examine the influence of a number of characteristics on the sense of personal control. These characteristics included: age, sex, household language, immigration status, region of residence, marital status, number of close friends and relatives, education, main activity, occupation, household income, group membership, volunteer status, religiosity, life satisfaction, perceived health status, and happiness.

1. The scale which measures sense of mastery is based on the work of L.I. Pearlin and C. Schooler. 1978. "The structure of coping." *Journal of Health and Social Behaviour* 19(1):2-21.

This paper uses the 2003 General Social Survey (GSS) to examine the extent to which Canadians aged 15 and over feel a sense of mastery, or responsibility for what happens to them in life. A mastery scale, comprised of seven indicators measuring such elements as the respondent's perceived control over things that happen in life, problem-solving capability, feelings of helplessness and the ability to accomplish goals, was used in the analysis. A statistical model was also designed to examine the influence of a number of socio-demographic, family, economic, community and well-being characteristics on the respondent's sense of personal control.

Indicators of control over life chances

In general, Canadians have a fairly high sense of being in charge of the circumstances in which they find themselves. According to the GSS data, the average score was 18.8 on the scale ranging from 0 to 28

(the higher the score, the greater the sense of mastery). Specifically, nearly nine in ten (89%) respondents reported that they agreed or strongly agreed that what happens to them in the future mostly depends on them. Similarly, 84% agreed that they could do just about anything in life that they really set their mind to. In contrast, only about three in ten respondents agreed or strongly agreed that they sometimes felt pushed around in life or that they have little control over the things that happen to them.

Most Canadians also reported positive feelings about managing the problems in their lives. (These results are based on each respondent's own interpretation of what constitutes "problems.") Indeed, 77% of respondents disagreed or strongly disagreed that there is little one can do to change many important things in life. At least seven in ten rejected the statements that they often felt helpless in dealing with problems of life or that there is really no way to solve some of their problems.

Younger adults are most likely to feel in control

The perception of control over life peaks for adults aged 25 to 34 and then declines steadily. For example, on the mastery scale, the average score for people in their late 20s and early 30s was 19.6, then falls to 18.2 for those in their early fifties and to 16.7 for seniors in their late seventies. Consistent with previous research which found that perceived control declined at older ages³, this reduced sense of mastery may reflect lower energy and physical health changes as well as the loss of valued social roles.⁴ Perhaps younger adults feel that most of their lives are still ahead of them, and as a result, they are more optimistic about their chances in life. In contrast, people may become more realistic with age, basing their expectations on their cumulative experiences. Results of the statistical model show that even after taking into account other characteristics, the relationship held between age and a person's sense of control.

There was some evidence that men experienced a greater feeling of mastery than women, but the difference between the sexes was not large. A 2002 American study found that men generally have a greater sense of control than do women, particularly at older ages,⁵ perhaps because of women's less secure economic conditions (for example, less attachment to the labour force, lower average incomes and so on). Converging labour market experiences and educational levels of men and women may contribute to growing similarity in perceptions of control.

Both place of birth and region of residence played a role in how individuals perceived their ability to affect their situations and outcomes. According to the GSS data, foreign-born individuals feel less in control of their lives than do Canadian-born individuals. (Mastery score values averaged 18.1 for immigrants arriving before 1990; 17.5 for those landing between 1990 and 2003; and 19.0 for people born in Canada.) Immigrants

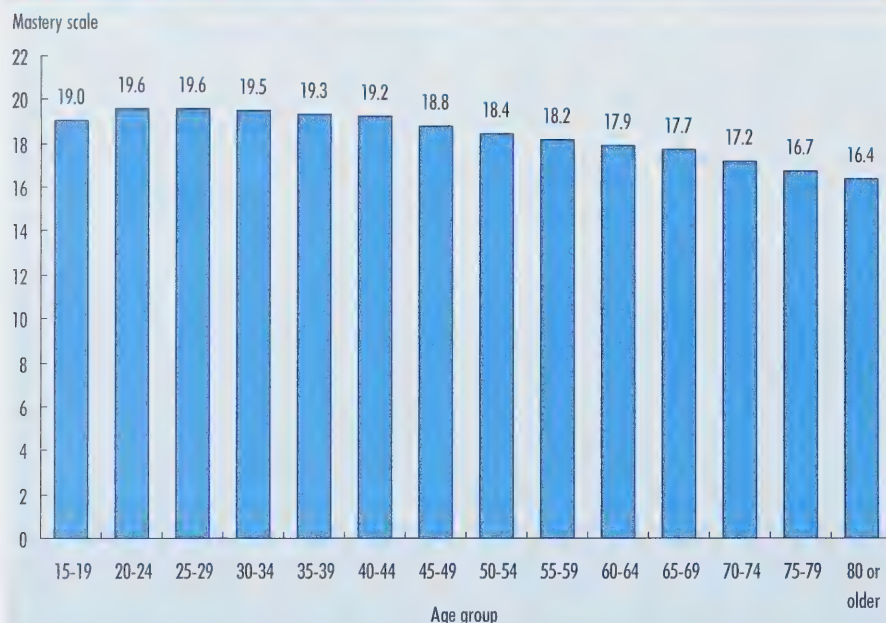
GST

In general, Canadians have a fairly high sense of being in charge of the circumstances in which they find themselves

% of Canadians aged 15 and over

	Total	Agree or strongly agree	Neither agree nor disagree	Disagree or strongly disagree
I believe that...				
...what happens to me in the future mostly depends on me	100	89	4	7
...I can do just about anything I really set my mind to	100	84	6	10
...sometimes I feel that I am being pushed around in life	100	32	7	61
...I have little control over the things that happen to me	100	30	9	61
...I often feel helpless in dealing with problems of life	100	23	7	70
...there is really no way I can solve some of the problems I have	100	21	6	73
...there is little I can do to change many of the important things in my life	100	18	5	77

Source: Statistics Canada, General Social Survey, 2003.



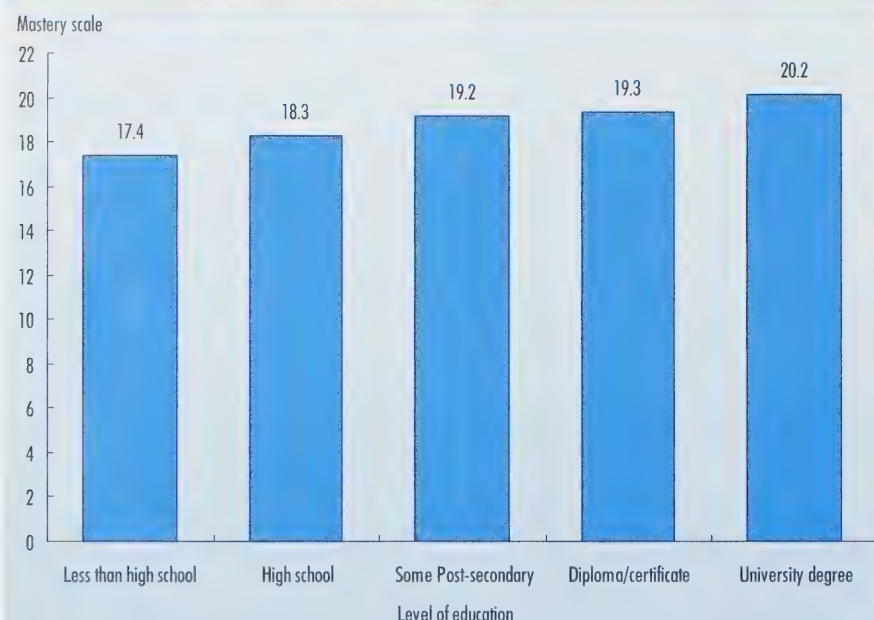
Source: Statistics Canada, General Social Survey, 2003.

may feel that they are confronted with more obstacles to achieving their goals than people born in this country. In fact, studies have found that foreign-born individuals may face difficulty obtaining work experience in Canada or having their previous work experience or qualifications recognized in Canada⁶ and, as a result, be underemployed.⁷

Region of residence also influenced perceived control. Compared to living in Quebec (mastery score of 18.0), living in any of the other regions was associated with a greater sense of control (ranging from 18.8 in the Atlantic Provinces to 19.3 in the Prairies). These relationships between place of birth, region of residence and mastery remain significant, even after accounting for all other variables in the statistical model.

Higher education key to perceived control

Social position, as reflected by various indicators of socio-economic status, can have an effect on an individual's sense of self, and presumably, on perceptions of control over his or her life. Indeed, the GSS data show that there is a clear relationship between education, household income, type of job and feelings of personal control over one's life. In terms of education, people who were university-educated scored 20.0 on the mastery scale, while those with less than high school scored 17.3. It may be that higher education provides people with the tools and resources necessary for meeting their goals, not only in terms of career development, but in other areas of life as well. These "learned effectiveness"⁸ skills – which may include being persistent, more adept at communication and able to gather, interpret and analyze information – can be directed toward problem-solving and achieving one's objectives. Higher education levels might also reflect more experience negotiating with large and complex organizations, for example social services, government or health systems.



Source: Statistics Canada, General Social Survey, 2003.

Perceptions of control over life are also influenced by a person's career. Average scores on the mastery scale were over 20.0 for those in management or professional occupations, but were below 18.0 for employees in blue-collar occupations related to processing, manufacturing, and utilities. Individuals who were not in the labour force scored even lower – an average of only 17.4. Even when accounting for other characteristics in the statistical model, these relationships held. The reason may be that the self-confidence common to people with more autonomy and control in their jobs extends to other aspects of their lives. An earlier study also found that the sense of personal control is greater among people with paid jobs than those not in the labour force and, furthermore, that the difference increases with more job autonomy and higher income.⁹

Consistent with the findings of education and occupation, the GSS data showed that respondents with household incomes of less than \$20,000 reported a lower sense of control over life chances (an average score of 16.8) than those in households earning \$60,000 or more (19.9). While it may not necessarily be true that "money buys happiness," it does provide a greater perception of being in charge of one's life. This sense of control might also arise from greater feelings of financial security when confronted with unexpected problems.

Physical and emotional well-being important to feeling in charge of life

There was a substantial difference in perceptions of control depending on the health status of respondents. People who rated themselves as being in excellent health, scored an average of 20.0 on the mastery scale, compared to 16.1 for those who reported that their health was fair or poor. While it is possible to take responsibility for certain aspects of one's health, with measures such as exercise, diet or lifestyle, accidents

and some illnesses are beyond one's control. Therefore, it is not surprising that individuals in less than optimal health feel that their sense of mastery is lower than that of others with little or no health challenges.

Indicators of emotional well-being, such as level of happiness and life satisfaction, are also associated with perceptions of control over life. People who were somewhat or very unhappy scored only 14.9 on the mastery scale, whereas those who were very happy scored 19.8. It seems, therefore, that when people experience positive feelings, they believe they exert more control over the situations in which they find themselves.

It should be noted that the relationship between indicators of well-being and perceptions of control over life chances may be reciprocal. For example, feeling in control may be mitigated by health problems or dissatisfaction with life; however, having a reduced sense of mastery could also lead to poorer health or well-being. Indeed, a 2005 study found that a low perception of control over one's own life negatively affects health outcomes, which in turn reduces sense of control.¹⁰

Large social network produces heightened sense of internal control

Involvement with a social network, whether it is membership in a group, having family and friends on whom to rely, or both, can influence a person's internal sense of control. Respondents who were single and those who were living common-law had similar scores on the mastery scale (19.1). In contrast, people who had been widowed felt the least power over their life chances (17.0). This is understandable since it would be more difficult to feel in charge of one's life after experiencing the death of a husband or a wife. In addition, widows are generally older and may be less financially secure, both of which are related to lower perceptions of control. The average

scores for married (18.8) and divorced or separated individuals (18.3) were more moderate. However, once the statistical model controlled for other variables, widowed and divorced people were found to score higher than single people, while people who were married or living common-law had lower scores than unmarried respondents. Perhaps "solo agents" feel they are better-placed to control their lives, since married people need to take their partner into account when making decisions.

Individuals with no close friends or relatives had a much lower sense of control over their life than those who had a wider social network. For example, respondents who said they had no close friends scored 16.9 on the mastery scale, compared to 19.5 for those with at least six friends. Even when holding the effect of other characteristics in the model constant, people with fewer close friends or relatives had a lower perception of their mastery skills than those with six or more people in their social network. Having significant others in one's life can offset feelings of isolation.

Community involvement associated with greater feelings of mastery

Being involved in a social network extending beyond immediate family and friends also appears to increase a person's sense of control over life chances. For example, respondents who did not belong to any organizations scored 17.9 on the mastery scale, compared to 20.1 for those who belonged to three or more groups. Perhaps being part of a larger community gives people a feeling of support that enhances their belief that they can accomplish their goals or overcome obstacles. Being part of a larger network could also help people to mediate or negotiate any difficulties they may be facing.

Similarly, volunteering in the year prior to the survey also increased the perception of control over one's life, possibly because volunteering is

done at the individual's discretion. Alternatively, it may connect people with others, thereby increasing the size of their social networks. Volunteering was associated with a score of 19.5 on the mastery scale, while those who did not scored 18.4. Even after accounting for all other characteristics in the model, this relationship still held. Again the influence may be reciprocal: individuals who have a heightened sense of personal control may be more outgoing and willing to participate in such groups.

Belonging to a religious organization might provide support and a sense of togetherness; on the other hand, believing in a higher power may encourage some people to feel relieved of some responsibility for their life chances. Religiosity – measured as the frequency of attendance at religious services – tended to reduce the amount of control people felt they had over their lives. For example, respondents who attended religious services every week had an average mastery score of 18.3, while those who rarely or never attended services had a score of 19.0. This relationship between being more religious and feeling less control over one's life remained even after taking the impact of other variables into account.

Summary

Although individuals' sense of mastery is quite high, a number of factors can influence a person's perception of control over their life chances. Generally, economic and emotional well-being contribute to a sense of mastery, perhaps by providing them with necessary resources and with the conviction that they have won their achievements by their own efforts. The results of the statistical model developed for this study show that the characteristics offering the strongest explanation for perceived control over life chances are education, income, age, life satisfaction, health and happiness.

Having a larger social support network, particularly close friends and relatives, also increases an individual's internal sense of life management. But while involvement in external groups or organizations and in volunteering increases a person's sense of control, frequent attendance at religious services does not.



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	B ¹		B ¹
Demographic characteristics		Occupation	
Age	-0.09*	Management	0.00
Sex		Professional	-0.04*
Male	0.00	Technologists, technicians, and technical operators	-0.03*
Female	-0.02*	Clerical	-0.06*
Region		Sales and services	-0.07*
Quebec	0.00	Trades, transport and equipment operators	-0.08*
Atlantic	0.04*	Primary industries	-0.06*
Ontario	0.08*	Processing, manufacturing, and utilities	-0.07*
Prairies	0.08*	Not in the labour force ²	-0.10*
British Columbia	0.06*	Household income	
Immigrant status		Less than \$20,000	-0.07*
Canadian-born	0.00	\$20,000 to \$29,999	-0.05*
Immigrated before 1990	-0.04*	\$30,000 to \$39,999	-0.05*
Immigrated between 1990 and 2003	-0.10*	\$40,000 to \$49,999	-0.03*
Family characteristics		\$50,000 to \$59,999	-0.02*
Marital status		\$60,000 or more	0.00
Single	0.00	Not stated or don't know	-0.06*
Married	-0.02*	Other characteristics	
Common-law	0.05	Number of groups of which a member	0.05*
Widowed	0.02*	Volunteered in the past year	
Divorced	0.03*	No	0.00
Number of close friends		Yes	0.02*
None	-0.02*	Religious attendance	
1 or 2	-0.03*	Rarely/not at all	0.00
3 to 5	-0.01	Weekly	-0.06*
Six or more	0.00	Occasionally	-0.03*
Number of close relatives		Well-being characteristics	
None	-0.02*	Life satisfaction	0.19*
1 or 2	-0.05*	Health status	
3 to 5	-0.01	Excellent	0.00
Six or more	0.00	Very good	-0.04*
Economic characteristics		Good	-0.06*
Education level		Fair or poor	-0.10*
University degree	0.00	Happiness	
Less than high school	-0.15*	Very happy	0.00
High school	-0.10*	Less than very happy	-0.09*
Some post-secondary	-0.04*		
Diploma or certificate	-0.06*	Adjusted R squared	0.23

1. Standardized regression coefficients expressed in standard deviation units. This is useful in comparing the relative impact of variables on the mastery score within the model.

2. Represents an "other" category of main activity such as childcare, home-making, illness, etc.

* Statistically significant from benchmark group shown in italics ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2003.

Learning Disabilities and Child Altruism, Anxiety, and Aggression

by Anne Milan, Feng Hou, and Irene Wong

Most children in Canada are physically and emotionally healthy, and the majority of children do not have social and behavioural problems. Yet some children do experience challenges both in the classroom and the wider society. One group of children whose characteristics may affect their behaviour is those who have been identified as learning disabled. They may have difficulties with written or spoken language, comprehension, calculation, or reasoning and often experience academic disadvantages or difficulties with their social relationships.

This paper uses Canadian data from the 2002/03 National Longitudinal Survey of Children and Youth (NLSCY) to examine the levels of altruism or prosocial behaviour, anxiety or emotional disorder, and physical aggression or conduct disorder for children aged 8 to 11 with and without learning disabilities, controlling for characteristics of the child, the family and parenting style. Children were identified as having learning disabilities if they were diagnosed as having this long-term condition by a health professional.

CST Definition of Learning Disabilities¹

Partial definition adopted by the Learning Disabilities Association of Canada on January 30, 2002, and presented on their website «www.ldac-tacc.ca».

"Learning Disabilities" refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.

Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g., planning and decision-making).

Learning disabilities range in severity and may interfere with the acquisition and use of one or more of the following:

- oral language (e.g., listening, speaking, understanding);
- reading (e.g., decoding, phonetic knowledge, word recognition, comprehension);
- written language (e.g., spelling and written expression); and
- mathematics (e.g., computation, problem solving).

Learning disabilities may also involve difficulties with organizational skills, social perception, social interaction and perspective taking.

Learning Disabilities Association of Canada. «www.ldac-tacc.ca» Accessed Oct 20, 2005.

How do learning disabilities influence social behaviour

According to the 2002/03 NLSCY, about 4% of 8- to 11-year-olds were identified as being learning disabled in 2002. Existing research findings on the social and behavioural outcomes for children with and without learning disabilities have been varied, and may depend on how particular behavioural outcomes are measured. Some studies have concluded that there are few differences between children with and without learning disabilities on certain social dimensions, for example, in peer acceptance and self-concept¹. Two reviews of recent research literature reported that although children with learning disabilities have a lower self-perception in the academic domain, their overall self-concept is on par with other children.² An earlier study, however, found that children with learning disabilities were less well-liked and less accepted compared to other children.³

Previous research indicated that social cues seem to be important to children with learning disabilities⁴, and social skill deficits may be an important part of having this condition.⁵ Social indicators of children with learning disabilities may include impulsiveness, frustration, poor sportsmanship, and difficulties with creating friendships, accepting changes in routine, interpreting subtle or nonverbal cues, and working with others.⁶ The lack of self-esteem experienced by students with learning disabilities might create feelings of inadequacy or inferiority,⁷ which could be an impediment to establishing social relationships. Consequently, children with learning disabilities might find it difficult to develop an altruistic or compassionate attitude towards others. The results of the present study show that 8- to 11-year-olds with learning disabilities had lower average scores on the altruism/prosocial behaviour scale than did other children. According to the NLSCY, children identified as having learning disabilities scored 12.84

<div> <div>CST</div> <div>Children with learning disabilities¹ fare less well than other children on measures of social behaviour</div> </div>		
	No learning disabilities	Learning disabilities
Children age 8-11		
Altruism	14.45	12.84*
Anxiety/emotional disorder	2.63	3.89*
Aggression	1.27	2.29*

1. Includes learning disabilities identified in 2000 or 2002
 * Statistically significant at $p < .05$ from children with no learning disabilities
 Source: Statistics Canada, National Longitudinal Survey of Children and Youth, PMK Report, 2002/03.

on the altruism/prosocial behaviour scale compared to 14.45 for children without learning disabilities. Once children's age and sex were taken into account in the statistical model, the altruism/prosocial behaviour scores for children with learning disabilities narrowed slightly to 1.51 points below children without learning disabilities (from a gap of 1.61 points).

Anxiety and aggression more common for children with learning disabilities

Children who exhibit emotional problems, depression or anxiety are less likely to develop to their full potential. Research results on the association between learning disabilities and anxiety/emotional disorder have been mixed. Some findings indicate that there is little difference in the depression or anxiety measures for children with and without learning disabilities when rated by children, although a higher level of depression among children with learning disabilities was found when rated by teachers.⁸ Researchers have also documented that children with learning disabilities experience more minor somatic complaints — such as fatigue — than do other children, which can increase anxiety.⁹ Other research found that although there were no consistent differences between children with and without learning disabilities in their non-academic problem solving, the anxiety

of children with learning disabilities increased in testing situations relative to other children.¹⁰

According to the present study, the anxiety/emotional disorder scores of children in the NLSCY was higher for those with learning disabilities, compared to other children (scale scores of 3.89 and 2.63, respectively). The presence of learning disabilities continued to be statistically significant after entering child's age and sex into the model. The results from Model 1 show that the difference between the anxiety/emotional disorder scores of children with and without learning disabilities remained virtually the same (i.e., 1.27 points higher for children with learning disabilities compared to other children).

Related to greater difficulties in the areas of anxiety and altruism, children with learning disabilities may also show more physical aggression or conduct disorder. The frustration that typically accompanies learning disabilities¹¹ may result in aggression if children feel that circumstances are beyond their control. The social skills deficits reported to characterize children with learning disabilities¹² may also be manifested through aggressive behaviour. In fact, patterns similar to the results of anxiety/emotional disorder hold for the findings of aggressive behaviour. That is, children who have learning disabilities have higher scores on the

	Altruism	Anxiety	Aggression
Model 1			
Learning disabilities	-1.51*	1.27*	1.00*
<i>Child characteristics</i>			
Age of child	0.06	-0.04	-0.10*
Female	1.50*	0.00	-0.35*
Intercept	13.12*	3.05*	2.37*
Adjusted R ²	0.05	0.01	0.03
Model 2			
Learning disabilities	-0.69	0.74*	0.60*
<i>Child characteristics</i>			
Age of child	0.08	-0.02	-0.09*
Female	1.32*	0.11	-0.23*
<i>Family characteristics</i>			
Two parent	-0.38	-0.38*	0.11
Low-middle income adequacy	0.01	0.26*	0.26*
Family functioning score	-0.10*	0.02*	0.01
Ineffective parenting	-0.22*	0.22*	0.20*
Intercept	16.00*	0.96*	0.31
Adjusted R ²	0.13	0.14	0.20

1. Includes learning disabilities identified in 2000 or 2002

Unstandardized regression coefficients for altruistic/prosocial behaviour, anxiety/emotional disorder, and physical aggression/conduct disorder of children aged 8-11.

Note: *significant at $p < .05$

Source: Statistics Canada, National Longitudinal Survey of Children and Youth, PMK Report, 2002/03.

aggression/conduct disorder scale than do other children – a difference of 1.02 points (scores of 2.29 and 1.27, respectively).

Children's age and sex may influence their aggressive behaviour, given that recent research found that young girls (aged 5 to 11) showed less physical aggression compared to boys, and decreased with age for girls while remaining constant for boys.¹³ According to the results of the present study, the gap on the aggression/conduct disorder scale for children with and without learning disabilities remained largely

unchanged even after including child's age and sex in the statistical model (a difference of 1.00 point).

Why family characteristics matter

Family-related characteristics such as growing up in a lone-parent household, or in families with low income or high levels of dysfunction can have a negative effect on child outcomes. Children of lone parents fare less well in their emotional and behavioural outcomes compared to all children.¹⁴ Similarly, previous research found some support for

the influence of household income on the behavioural and cognitive outcomes of children.¹⁵ Perhaps most significant is the role of parenting practices. A 2005 study found that children whose parents use more punitive measures exhibited higher levels of aggressive behaviour, higher levels of anxiety and lower levels of pro-social behaviour.¹⁶

In the present study, controlling for family characteristics eliminated the statistically significant difference in the level of altruism or prosocial behaviour between children with and without learning disabilities. Once family characteristics were included in the statistical models, the scores on the anxiety/emotional disorder scale continued to be statistically significant, but the scores for children with learning disabilities were only 0.74 points higher than children without learning disabilities (from an original difference of 1.26). Similarly, when family characteristics were introduced in Model 2, the gap in aggression/conduct disorder scores between children who had learning disabilities and other children fell to 0.60 points (compared to a gap of 1.02 without controlling for such factors). Overall, the combined effects of family and child characteristics account for about 41% of the difference in the anxiety/emotional disorder score, as well as the aggression/conduct disorder score, for the children with learning disabilities compared to other children.¹⁷

Family characteristics reduce much of the impact of learning disabilities

According to the NLSCY, children with learning disabilities do experience less altruism, and greater anxiety and aggression, but the strength of the association is rather weak. In other words, children with learning disabilities exhibit only slightly higher behavioural problems than other children. It is clear that although the presence of learning disabilities is associated with behavioural

The National Longitudinal Survey of Children and Youth (NLSCY) is used to examine the extent to which children with learning disabilities exhibit altruism or prosocial behaviour, anxiety or emotional disorder, and physical aggression or conduct disorder, based on the NLSCY behaviour scales (see "Variable Descriptions" for individual scale items). The NLSCY is a joint project between Human Resources and Social Development Canada and Statistics Canada, and focuses on the characteristics and life experiences of children in Canada as they develop from birth to adulthood. The children are followed longitudinally, with interviews every two years, excluding children living in institutions for six months or more, and those living in the Yukon and Northwest Territories. In the initial cycle (1994/95) information was collected for nearly 23,000 children aged 0 to 11. In addition to a household-based interview with the Person Most Knowledgeable (PMK) about the child (typically the mother), the NLSCY collected information using self-completed questionnaires for 10 and 11-year-olds. In this study, only the PMK assessed information about the children is included in the analyses.

This study uses responses for about 5,000 children aged 8 to 11 in 2002/03. Of this group, about 200, representing 61,000 children, have learning disabilities. Because of the nature of the longitudinal sample, 8 to 11-year-olds in 2002 are children still in the survey and who were originally sampled as 0 to 3-year-olds in 1994. While the longitudinal sample is representative of the 1994 population, it may not be representative of the 2002 population as children may have left the study or the country since 1994, or may have entered Canada as immigrants.

Only those who recently (2000 to 2002) have been diagnosed by a health professional with a long-term learning disability¹ and who still have a learning disability in 2002 are

identified as learning disabled in this article. The models include several control variables such as age and sex, income adequacy in 2002 relative to family size, family type, family functioning, and ineffective parenting.

For the analyses, family functioning and ineffective parenting are scales operationalized at the interval level (see "Variable Descriptions" for scale items). Age of child is measured in years, while the remaining indicators are coded as: sex of child (female, male), income adequacy (low/middle, high), family type (two or one parent), with the last categories serving as the reference groups. Multiple regression is used to relate the independent variables to the child outcomes. The slope estimates or regression coefficients indicate the average change in the dependent variable associated with a unit change in each of the independent variables, when the other independent variables are held constant.² The unstandardized coefficients for each child outcome show the difference in the scale values for children with and without learning disabilities, taking into account the characteristics of the child (Model 1) and both child and family characteristics (Model 2).

Differences between frequent and occasional behaviours (i.e., altruism, anxiety, or aggression) were not distinguished in these analyses. Most children are prosocial, and do not have problem behaviours with aggression or anxiety. Furthermore, even higher levels of aggressive or anxious behaviours for children with learning disabilities compared to other children may still be considered within the normal range.

1. Long-term learning disabilities refer to an actual or expected duration of six months or more.
2. Lewis-Beck, M.S. 1989. *Applied Regression: An Introduction*. Newbury Park, CA: Sage.

difficulties, there are other factors which are better able to explain the variation in the child outcomes.¹⁸ Throughout the analyses, adding family characteristics to the models reduced the differences between children with and without learning disabilities. For example, children who experienced an ineffective parenting style also had higher levels

of aggression/conduct disorder and anxiety/emotional disorder, and lower altruism/prosocial behaviour scores. An earlier study found that families of children with learning disabilities experienced greater stress but are similar to other families with respect to family cohesion and household rules.¹⁹

Summary

Early life experiences of children can have a significant influence on their development and well-being. The influence of these experiences for children with learning disabilities is found to be similar to other children. Children with learning disabilities did have lower altruism or prosocial behaviour, and higher

levels of anxiety/emotional disorder and aggression/conduct disorder than did other children, however, the differences in the scores between children with and without learning disabilities were not large, and may well be within the normal range of these behaviours. Although children with learning disabilities were slightly more likely to exhibit behavioural problems than other children, including family characteristics in the statistical models reduced much of the impact of learning disabilities. This suggests that the challenges faced by children with learning disabilities may be at least partially offset by a positive and supportive family environment.



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17. This proportion is calculated as [(the difference in the scale scores between children with and without learning disabilities) – (the difference in the coefficients between these groups once child and family characteristics are included in the model)] / (the difference in the scale scores between children with and without learning disabilities)]. For example, the combined effects of child and family characteristics contribute 41% to the difference in the prosocial behaviour scores for children with and without learning disabilities, i.e., (1.26-0.74) / 1.26=41%.
18. This improvement is based on the increase in the R² values from Model 1 to Model 2 for each outcome, i.e., the proportion of variation in the dependent variable that can be explained by particular independent variables in a model.
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Family functioning scale items

The scale includes the following 12 questions, each of which contains four response categories (i.e., 1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). The total score for the additive scale ranges from 0 to 36, a high score indicating the higher levels of dysfunction. Values were recoded in order to have a value of 0 for the lowest score, that is, individual items were recoded from 0 to 3 (rather than the original range of 1 to 4), and reversed where necessary so that higher scores indicated dysfunction. This strategy also applies to the other scales included in the analyses.

- Planning family activities is difficult because we misunderstand each other.
- In times of crisis we can turn to each other for support.
- We cannot talk to each other about sadness we feel.
- Individuals (in the family) are accepted for what they are.
- We avoid discussing our fears or concerns.
- We express feelings to each other.
- There are lots of bad feelings in our family.
- We feel accepted for what we are.
- Making decisions is a problem for our family.
- We are able to make decisions about how to solve problems.
- We don't get along well together.
- We confide in each other.

Ineffective parenting scale items

The scale includes the following seven questions, each of which contains five response categories. The first item has the response categories: never, about once a week or less, a few times a week, once or two times a day, many times each day. The response categories for the other six items are: never, less than half the time, about half the time, more than half the time, all the time. The total score ranges from 0 to 28, a high score indicating the presence of hostile/ineffective interactions.

- How often do you get annoyed with ... for saying or doing something he/she is not supposed to do?
- Of all the times that you talk to ... about his/her behaviour, what proportion is praise?
- Of all the times that you talk to ... about his/her behaviour, what proportion is disapproval?
- How often do you get angry when you punish ...?

- How often do you think that the kind of punishment you give him/her depends on your mood?
- How often do you feel you are having problems managing him/her in general?
- How often do you have to discipline him/her repeatedly for the same thing?

Low to middle income adequacy consists of the following categories

- Household income is less than 40,000 and household size is up to 4 persons; or
- Household income is less than 60,000 and household size is 5 or more persons.
- Respondents who do not fall into these categories were coded as high income adequacy.

Altruism/prosocial behaviour scale items

The scale includes the following ten questions, each of which contains three response categories (i.e., never or not true, sometimes or somewhat true, often or very true). The total score ranges from 0 to 20, a high score indicating the presence of prosocial behaviour.

- Shows sympathy to someone who has made a mistake.
- Will try to help someone who has been hurt.
- Volunteers to help clear up a mess someone else has made.
- If there is a quarrel or dispute will try to stop it.
- Offers to help other children (friend, brother, or sister) who are having difficulty with a task.
- Comforts a child (friend, brother, or sister) who is crying or upset.
- Spontaneously helps to pick up objects which another child has dropped (e.g. pencils, books).
- Will invite bystanders to join in a game.
- Helps other children (friend, brother, or sister) who are feeling sick.
- Helps those who do not do as well as he does.

Anxiety/emotional disorder scale items

The scale includes the following seven questions, each of which contains three response categories (i.e., never or not true, sometimes or somewhat true, often or very true). The total score varies from 0 to 14, a high score indicating the presence of behaviours associated with anxiety and emotional disorder.

GST Variable Descriptions (continued)

- Seems to be unhappy, sad or depressed.
- Is not as happy as other children.
- Is too fearful or anxious.
- Is worried.
- Cries a lot.
- Is nervous, high-strung, or tense.
- Has trouble enjoying self.

Physical aggression/conduct disorder scale items

The scale includes the following six questions, each of which contains three response categories (i.e., never or not true, sometimes or somewhat true, often or very true).

The total score ranges from 0 to 12, a high score indicating behaviour associated with conduct disorders and physical aggression.

- Gets into many fights.
- When somebody accidentally hurts..., ...reacts with anger and fighting.
- Physically attacks people.
- Threatens people.
- Is cruel, bullies or is mean to others.
- Kicks, bites, hits other children.

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- ➔ Canadian Institute for Health Information (CIHI)
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Till death do us part? The risk of first and second marriage dissolution

by Warren Clark and Susan Crompton

Marriage has been on just about everyone's mind for the last few years. While the discussion was sparked by the debate over same-sex marriage, many thoughtful Canadians were led to consider just what marriage means in today's society.

Marriage as we have understood it over the last 50 or 60 years seems to be losing its appeal. Marriage is being "de-institutionalized", in the words of American social researcher Andrew Cherlin, as old social norms crumble and couples must negotiate new, mutually acceptable standards of behaviour.¹

Certainly, there is now less marriage, partly because young adults are delaying marriage and partly because common-law union is increasingly replacing marriage among Canadians of all ages.² Also, there is more divorce; well over one-third of Canadian marriages will end in divorce before the couple celebrates their 30th anniversary.³ Finally, marriage is no longer a prerequisite to childbearing, as more and more children are being born to single mothers or unmarried couples.⁴

Nevertheless, the great majority of people do marry. This article uses the General Social Survey on family history to briefly examine the basic

characteristics of Canadians who have legally married once, twice or more than twice. It then uses a proportional hazard model to identify some of the factors that are associated with ending a first and a second marriage by divorce or separation.

The first marriage

According to the 2001 General Social Survey (GSS), just slightly more than 16.6 million Canadian adults — 80% of the population aged 25 and over — have married at least once.

On average, Canadian adults entered their first marriage when they were about 25 years old (for 89%, their first marriage is their current marriage). The grooms had been about two and a half years older than the brides, at 26.2 and 23.6 years old, respectively. (See Appendix Table 1.)

Most people married another single person, but a few of them (6%) exchanged their first matrimonial vows with someone who had been married before. And although living common-law was not widely acceptable before 1980 (when most of them were courting), about 15% had lived with their spouse before the wedding.

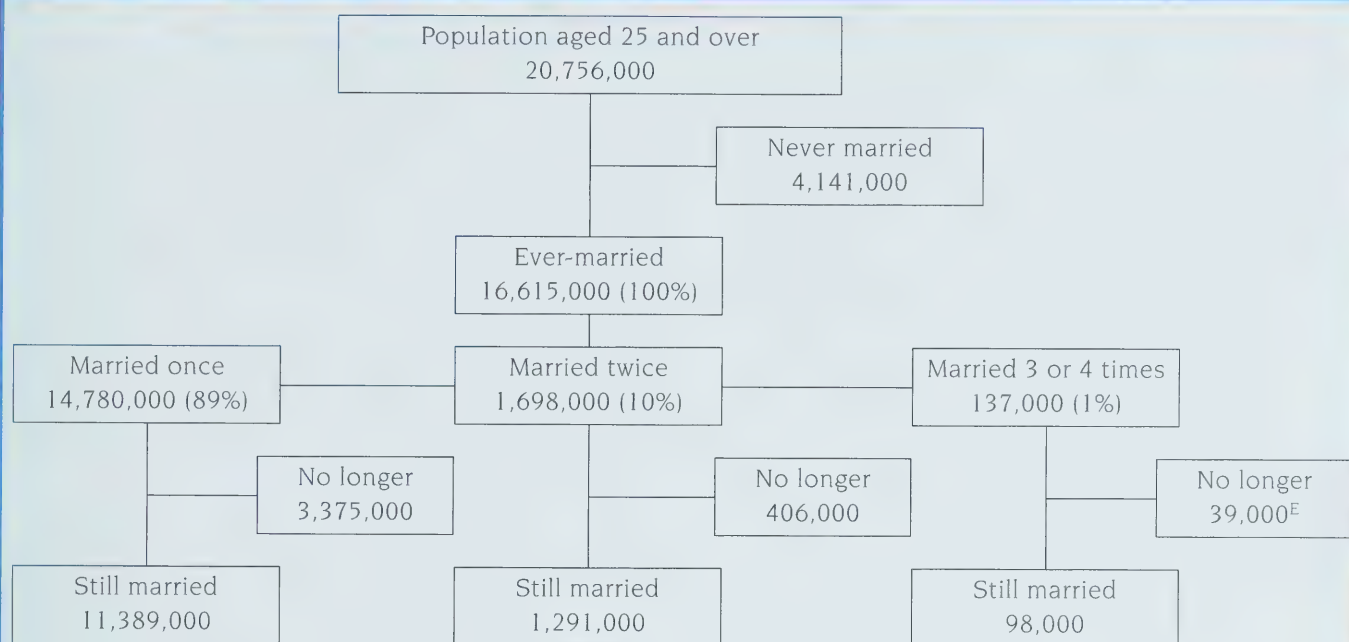
About 9 in 10 ever-married Canadians (88%) have raised at least one

child and at the time of the survey, 60% of them still had children living at home. Having children tends to bring people back into the places of worship they may have neglected in their youth,⁵ and indeed the majority (86%) of ever-marrieds reported that they belonged to a religious faith. Of these, 42% had attended religious services at least once a month in the year preceding the survey. (The corresponding rates for adults who have never married are 77% and 22%, respectively.)

At the time of the GSS, over two-thirds of ever-married people (69%) were still with their first spouse and they had been married for an average of 23.5 years. But for 23%, their first marriage had ended in dissolution following about 11 years of matrimony. (For the remaining 9%, their first marriage had ended in their spouse's death after 34 years together.)

Age at marriage and living common-law are key factors in first marriage failure

The success or failure of a marriage is ultimately decided by the deeply personal dynamics of the couple and their unique situation. However, a hazard model can be used to calculate the relative likelihood



E High sampling variability: use with caution.

Note: "No longer" includes those separated from their current spouse, divorced and widowed.

Source: Statistics Canada, General Social Survey, 2001. Unpublished data.

that a person's marriage will end in separation or divorce, given that the individual has certain socio-demographic characteristics. (See "What you should know about this study.")

One of the key factors associated with a first marriage breaking down is a newlywed's age. Someone marrying in their teens faces a risk of marriage dissolution almost two times higher than a person who marries between the ages of 25 and 29. In contrast, people who wait until their mid-30s or later to marry run a risk 43% lower. (The hazard ratio – or risk – is estimated for each variable when all other factors in the model are controlled for. See "What you should know about this study" for the list of variables included.) Age difference between spouses is not a significant risk factor if the husband is more than 5 years older than his wife, but it is 29% higher if he is more than 5 years younger.

People with less than high school education at the time of their first marriage face a 38% greater risk of marital dissolution than those with secondary completion; those with a university degree are at 16% less risk, when all other factors in the model are controlled for. This finding may seem contradictory – presumably people with lower socioeconomic status are least able to afford to leave their marriage – but it supports evidence which suggests that people with higher social status (especially women) are happier and less likely to divorce.⁶

Living common-law is also strongly associated with a first marital breakdown. In fact, the risk is 50% higher among people who lived with their partner before the wedding than among those who did not. This finding is supported by recent Canadian research which clearly shows that marriages preceded by a common-law union are distinctly less

stable than those that began at the altar,⁷ possibly because the tradition of marriage is less important to people who have participated in non-traditional conjugal relationships.⁸

The longer a couple has been married, the greater their chances of staying together. For example, someone who married in the 1960s is at 13% lower predicted risk of first marriage dissolution than someone married in the 1970s; however, the risk is a notable 67% higher for someone married in the 1990s, even when all other factors are accounted for. This difference across the decades probably reflects people's changing expectations of marriage, particularly the shift in emphasis from family-oriented child-rearing to individually-based personal fulfillment.

Having children significantly reduces the predicted risk of first marriage failure: it is 73% lower than that for married partners without children, after controlling for all other

variables in the model. This finding bolsters the fact that, although children can put a strain on the adult relationship, marriage dissolution is actually less likely to occur among couples with than without children, an observation which is true across most societies and cultures.⁹

Religion and mother tongue are linked with staying married

Religious belief can also have a protective effect on first marriage. Although religious affiliation does not seem significant, religious observance is associated with marital durability. People who attend religious services during the year, even if only several times, have between a 10% and 31% lower predicted risk of marital dissolution than those who do not attend at all. (This excludes attending services on special occasions like weddings, christenings and funerals.)

The GSS does not provide information about respondents' cultural heritage. Nevertheless, given that language is a key transmitter of values and norms within a social group, mother tongue can be used as an indirect indicator of the attitudes to which a person was exposed while growing up.

People living outside Quebec, and whose mother tongue is neither English nor French, have a significantly lower risk of first marriage dissolution than the reference group (Anglophones outside Quebec), at almost 26% lower. The large majority of these allophones report that at least one of their parents was born in Asia or Europe, cultures which tend to have traditions that place strong emphasis on the importance of marriage and family.

On the other hand, Francophones in Quebec have even less risk of first marital failure, at 29% lower than Anglophones outside the province. This result is quite puzzling since Quebec posts a divorce rate higher than elsewhere,¹⁰ common-law unions are much more acceptable, and Quebec generally has a more

socially liberal attitude than the rest of the country.¹¹ In fact, being a francophone Quebecer is no longer a significant factor in lowering the risk of first marital dissolution if the attitudinal variables are removed from the hazard model (that is, importance of being in a couple, being married, and having children. Results of model not shown.)

The second marriage

The great 18th century English lexicographer Dr. Samuel Johnson famously remarked that remarriage was "the triumph of hope over experience."¹² But about 43% of Canadian adults whose first marriage had ended in divorce had married again by the time of the GSS,¹³ as had about 16% of those whose first spouse had died.

Canadians who married a second time averaged about 39 years old at the time of the wedding. Over half (55%) exchanged vows with someone who had also been married before, and more than one-third (37%) had already lived common-law with their new spouse.

At the time of the GSS, about 1.3 million of them (71%) were still married to their second spouse of almost 13 years. There are good reasons for believing that these marriages will continue to be successful. American research suggests that remarriages made after age 40 are more stable than first marriages.¹⁴ And the hazard model predicts that, all other factors being controlled for, Canadians who were in their 40s when they remarried face only half as great a risk of marital dissolution as those who were under 30. Even those who remarried in their 30s have a 27% lower risk of breaking up.

The reason dissolution risk falls as age at remarriage rises may be partly due to the partners' increased maturity. An American study reported that the quality of the relationship between the couple is better when both spouses are remarried; they scored higher on measures of intimacy-based reasons for marriage

than other types of couples and lower on external reasons.¹⁵ As for the "psychological baggage" they may bring to their new marriage, evidence suggests that the effect of divorce on general happiness, depression and general health is significant but weak, once the effects of demographic variables are removed.¹⁶

The first failure may help to set the stage for the next one

However, over one in five of Canadians who remarried had left their second spouse within an average of 7.6 years. Why someone's subsequent marriage should end in dissolution is perhaps more puzzling than why their first one did.

Some of the theories social research has presented to explain remarriage failure include: a personal psychology that makes someone more likely to end relationships; learned behaviour, that is, they solved the previous marital problem with divorce; lack of social support for remarriages; and a smaller pool of suitable candidates available for remarriage, which reduces the likelihood of finding a compatible partner.¹⁷

The first two hypotheses suggest that previous conjugal history may help to explain why the subsequent marriage failed. As shown earlier, both first and subsequent marriages contracted at a young age are less likely to succeed, probably because failure tends to repeat itself if a person has not corrected their "marital style". Adults who are twice-divorced were 3 years younger than their still-married counterparts, both the first time they tied the knot (22 versus 25) and the second (about 36 versus almost 40).

Interestingly, though, living common-law – which is much more common among twice- than once-married people and is strongly associated with a first marital breakdown – is not a significant factor in the dissolution of a subsequent marriage, once all other variables are controlled for.

	Risk ratio of marital dissolution			Risk ratio of marital dissolution	
	First marriage	Subsequent marriage		First marriage	Subsequent marriage
Gender			Religious affiliation		
Men	1.00	1.00	No religion	1.00	1.00
Woman	0.83*	0.91	Catholic	1.00	1.22
Age at start of marriage			Protestant	1.13*	1.22
Less than 20	1.98*	--	Others	1.07	2.35*
20 to 24	1.34*	--	Religious attendance		
25 to 29	1.00	--	Not at all	1.00	1.00
30 to 34	0.67*	--	Infrequently	0.90*	0.67*
35 and over	0.57*	--	At least once a month	0.69*	1.04
Age at start of marriage			Mother tongue and region of current residence		
Less than 30	--	1.00	Francophones in Quebec	0.71*	1.04
30 to 39	--	0.73*	Anglophones in Quebec	1.05	0.87
40 to 49	--	0.50*	Allophones in Quebec	1.25	0.66
50 and over	--	0.39*	Francophones in rest of Canada	1.00	1.83*
Age difference between spouses			Anglophones in rest of Canada	1.00	1.00
Husband 6 or more years older	1.09	0.87	Allophones in rest of Canada	0.74*	0.79
Less than 5 years between spouses	1.00	1.00	Population of community where respondent lived in 2001		
Husband 6 or more years younger	1.29*	0.90	One million or over	1.00	1.00
Lived common-law with spouse before marriage			250,000-999,999	1.11*	1.19
No	1.00	1.00	10,000-249,999	1.05	1.15
Yes	1.50*	1.05	Rural And Small Town Canada	0.87*	0.82
Decade when marriage started			Importance of being married to respondent's happiness		
Before 1960	0.29*	0.19*	Very important to my happiness	1.00	1.00
1960s	0.87*	1.03	Important	1.38*	1.28
1970s	1.00	1.00	Not very important	3.08*	2.70*
1980s	1.41*	1.43*	Not at all important	3.96*	4.30*
1990s or later	1.67*	2.50*	Importance of relationship as a couple to respondent's happiness		
Educational level at start of marriage			Very Important to my happiness	1.00	1.00
Less than high school graduation	1.38*	1.34	Important	1.20*	1.41*
High school graduation	1.00	1.00	Not very important	1.60*	1.54*
Some postsecondary	1.03	1.28	Not at all important	1.61*	1.15
Trade or vocational diploma	0.33*	0.90	Importance of having children to respondent's happiness		
College certificate or diploma	0.89*	1.34*	Very important to my happiness	1.00	1.00
University degree or certificate	0.84*	1.18	Important	0.86*	0.87
Presence of children in the marriage			Not very important	0.77*	0.86
No	1.00	1.00	Not at all important	0.47*	0.79
Yes	0.27*	0.79	Would you stay in a bad marriage for the sake of your children?		
			Yes	1.00	1.00
			No	2.16*	1.69*

* Significant statistical difference from reference group shown in italics ($p < 0.05$).

Note: Most subsequent marriages are second marriages.

Source: Statistics Canada, General Social Survey, 2001.

The importance of social support to the success of remarriage has been acknowledged by a number of researchers. The support received from family and friends plays a significant role in the quality of the marital relationship, especially in couples where both partners are remarried.¹⁸ In contrast, low levels of social support contribute to the psychological distress reported by people who have divorced, especially those who have left a marriage more than once.¹⁹

Being a member of a minority population is associated with subsequent marriage failure

The choice of a second marriage partner has interested sociologists long enough for them to produce two competing theories. The "learning hypothesis" proposes that a person looks for someone similar to themselves after the failure of a marriage to someone dissimilar; in contrast, the "marriage market hypothesis" argues that people end up with a dissimilar partner because of the limited number of candidates available for remarriage.²⁰ Neither hypothesis has trumped the other, and the results of the GSS hazard model are equally inconclusive.

Although higher education is a prime protective factor against first marriage dissolution, it is much less important to subsequent marriage dissolution. This seems to suggest that there may be more educational similarity between partners in second marriages. This interpretation is supported by a Dutch study of recently remarried adults that shows both sexes tend to choose a second partner who is better educated than their first; men especially are more likely to remarry a woman whose education more closely matches their own.²¹

On the other hand, the model's results also seem to speak to the difficulty of finding a compatible partner the second time around if a person belongs to a small population group. Two variables that played no

role in first marriage dissolution are significantly associated with the breakdown of subsequent marriages. First, the risk for a francophone living outside Quebec is 83% higher than that for an Anglophone, when all other factors in the model are controlled for. Second, being a member of a religious faith other than the predominant Catholic or Protestant churches increases the risk by 135%, compared with someone who has no religious affiliation at all.

It has become a truism that step-children are a prime contributor to the collapse of second marriages. The appeal of this idea is obvious, and teenagers especially can put any marital bond to the test, but studies are inconclusive: some find that they are a prime factor in remarriage failure²² yet others determine that they contribute to the marital satisfaction of the adults.²³ The GSS model predicts that, when all other variables are controlled for, the presence of children in the household at the time of a subsequent marriage is not associated with marital dissolution.

The hazard model also shows that some factors associated with marital success or failure are simply not within a person's power to control. For example, women have the same risk of subsequent marriage dissolution as men, which is somewhat surprising because they had a significantly lower risk for a first marriage break-up. The answer may lie in women's attitudes to marriage, since a new story appears when attitudinal variables are removed from the model. If the predicted risk is calculated using only socio-demographic variables, women and men in a first marriage have an equal risk of dissolution; but in a subsequent marriage, women face a 30% higher risk than men. (Results of model not shown)

The third marriage

In 2001, according to the GSS, almost 137,500 Canadian adults had been legally married more than twice. They

represented less than 1% of the ever-married population aged 25 and over. Virtually all of them had tied the knot three times.

Apart from their marriage habit, nothing much sets these serially-married Canadians apart, socio-demographically, from other married Canadians. They had entered their third marriage at an average age of almost 46, generally to someone who had also been married before. Over one-third (38%^E) had lived with their third spouse before the ceremony.

And although 71% had recently celebrated their 8th anniversary with their most recent partner, almost one-quarter (23%^E) had left their marriage after less than 4 years of matrimony.

Some researchers believe there is credible evidence that "...multiple marriers are different in personality and behavior (sic) from those who remarry only once."²⁴ A 1990 U.S. study specifically of serial marriers agreed that both men and women married multiple times have higher levels of anxiety than those married only once or twice; multiply-married women also reported more psychological distress than other married women, even after controlling for their divorce history.²⁵

Believing in Marriage produces a stronger marriage

This psychological profile – however brief – may help to shed some light on a rather counterintuitive finding from the GSS. One would expect that people who marry multiple times are keen believers in the value of marriage and family, but the data tell a different story.

Serial marriers are significantly less likely to claim that being married is important or very important to their happiness, at 69% versus 82% of people who married only once (including those divorced or widowed as well as those still married). Of course, deeply held beliefs can be altered by a person's experience, especially a severely negative experience such as the failure of their

This study is based on the General Social Survey (Cycle 15) on family history, conducted by Statistics Canada during 2001. Almost 25,000 Canadians aged 15 and over living in private households in the 10 provinces were asked to provide information about all their marital and common-law unions, on separation, divorce and death of their partners, as well as a wide array of background characteristics.

This article focuses on adults aged 25 and over who have been legally married a minimum of one time, and the likelihood that their marriage will end in divorce or separation. The analysis is based on about 14,550 respondents who have married only once, 1,750 who married twice and 140 who married more than twice. These respondents represent almost 14.8 million, 1.7 million and 137,000 Canadians aged 25 and over respectively.

Ever-married: Adults aged 25 and over who have been legally married at least once, regardless of their marital status (still married, divorced, widowed) at the time of the survey.

Once-, twice- and serially-married: Persons who, as of the time they were surveyed, had legally married once, twice or more than twice, respectively.

Dissolution: The end of marriage due to separation, divorce or annulment. (Widowhood is excluded.) Because this study examines the breakdown of the relationship rather than its legal termination, dissolution is defined to occur at the time of final separation from the spouse; in the small

number of cases where marriage ended with an immediate divorce without a period of legal separation, it is the time at divorce. This category therefore includes respondents who were separated but whose divorce was not yet final; these individuals account for about 30% of all persons in this category.

Risk ratio: The predicted likelihood that an individual's marriage will end in separation or divorce, compared with a reference individual. The ratios were calculated using a proportional hazard model, a statistical technique that estimates the likelihood that an individual will experience an event (in this case, marital dissolution), given a certain set of explanatory variables.

In this study, the explanatory variables are: sex; age at start of marriage; age difference between spouses; whether the couple had lived together before marriage; the decade in which the marriage started; educational level at the time of marriage; whether there were children in the household during the marriage; religious affiliation; religious attendance; mother tongue and region of residence. The model also included variables that measured the respondent's attitudes to marriage, being part of a couple and having children, as well as whether they would stay in an irreparable marriage for the sake of the children (if their children were less than 15 years old).

marriage. But this lack of commitment to the idea of marriage may become a self-fulfilling prophecy, since it is a key factor associated with marital collapse. People who do not believe that marriage is important for them to be happy have a predicted risk of both first and subsequent marriage failure 170% to 330% higher than people who feel it is very important, when all other variables are controlled for.

Similarly, serial marriers are almost twice as likely to say they would not stay in a bad marriage even for the sake of their children (50% compared with 28% of once-marrieds). Of course, this is probably

a very hypothetical question for most once-marrieds, who may overstate their case, while serial marriers might have a more realistic idea of how much they are prepared to tolerate. Nevertheless, compared with those who believe they would stay in an irreparable marriage for the sake of their kids, the predicted risk of a first or second marriage dissolution is 69% to 116% higher for people who are prepared to leave.

Summary

Current events may suggest that the estate of marriage is in disarray. Some people would argue that society's

acceptance of the individual's demand for personal fulfillment has freed irresponsible and hedonistic people to flit from one spouse to another.

However, marriage still seems to possess an aura that elevates it above a simple living arrangement. Most Canadians marry once and only once; less than one percent walk down the aisle more than twice. Married couples generally have "greater commitment and higher relationship quality" than partners in common-law unions,²⁶ which suggests something about the transcendent nature of the marriage bond itself.

The factors associated with the break-up of a first marriage tend to be different than those that are significant risk factors for the dissolution of a subsequent marriage. In general, however, the predicted likelihood that their marriage will succeed is higher for people who marry in their 30s, did not live common-law before the wedding, have children, attend religious services, are university educated, and believe that marriage is important if they are to be happy.



Warren Clark is senior analyst and **Susan Crompton** is Editor-in-Chief of *Canadian Social Trends*.

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Current marital status (2001)	Ever-married: At least once			
	Total	Married	Divorced	Widowed
Both sexes (000s)	16,701	12,778	2,416	1,405
Men	7,810	6,466	1,043	300
Women	8,788	6,312	1,372	1,104
Average age at first marriage				
Both sexes	24.8	25.1	24.0	23.8
Men	26.2	26.3	25.5	26.0
Women	23.6	23.8	22.8	23.2
Average age difference between respondent and first spouse				
Both sexes	3.5	3.4	3.8	4.8
Men	3.3	3.2	3.8	3.5
Women	3.7	3.5	3.8	5.2
Average duration of first marriage (years)				
Total	21.7	22.2	12.2	33.9
Still married	23.5	23.5	..	..
To divorce or separation	11.1	8.9	12.1	* 13.4
To death of spouse	34.2	23.0	16.7	35.7
First spouse's marital status before the marriage (%)				
Total	100.0	100.0	100.0	100.0
Widowed	0.6	0.5	F	1.6 ^{E*}
Divorced	5.5	5.3	7.6*	3.9
Single	93.9*	94.2	92.0*	94.5*
Respondent lived common-law with first spouse before marrying				
Total	100.0	100.0	100.0	100.0
Yes	14.9	14.8	22.4*	2.7*
No	8.3*	4.3	29.9*	8.0*
Have never lived common-law	76.8*	80.9	47.7*	89.3*
Reason for end of first marriage				
Total	100.0	100.0	100.0	100.0
Still married	68.7*	89.1	..	..
Divorced or separated	22.7*	9.7	99.2*	9.5
Death of spouse	8.6*	1.2	F	90.5*

^E High sampling variability; use with caution.

^F Sample size too small to produce reliable estimate.

* Statistically significant difference from reference group (currently married) marked in italic ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2001.

Current marital status (2001)	Ever-married: At least twice			
	Total	Married	Divorced	Widowed
Both sexes (000s)	1,834	1,389	299	146
Men	865	722	115	28 ^E
Women	970	667	184	119
Age of respondent at start of second marriage				
Both sexes	38.7	39.1	35.6	41.3
Men	40.6	40.7	38.6	45.2
Women	37.1	37.4	33.7	40.5
Average age difference between respondent and second spouse				
Both sexes	5.9	5.9	5.7	6.0
Men	6.5	5.6	6.5	5.7
Women	5.3	5.2	5.2	6.1
Average duration of second marriage (years)				
Total	12.2	12.5	7.7	18.7
Still married	12.7	12.7	..	..
To divorce or separation	7.6	6.7	7.7	F
To death of spouse	19.3	F	F	20.0
Marital status of second spouse before entering into second marriage (%)				
Total	100.0	100.0	100.0	100.0
Widowed	7.9	7.1	F	22.6 ^{E*}
Divorced	46.6	48.3	45.6	32.7 ^{E*}
Single	45.5	44.6	50.0	44.7
Respondent lived common-law with second spouse before marrying				
Total	100.0	100.0	100.0	100.0
Yes	36.8	38.9	36.1	18.6 ^{E*}
No	8.1*	5.6	20.6*	F
Have never lived common-law	55.1	55.5	43.3	75.1*
Reason for end of second marriage				
Total	100.0	100.0	100.0	100.0
Still married	70.6*	93.0	0.0	0.0
Divorced or separated	21.7*	6.1	98.5*	15.0 ^{E*}
Death of spouse	7.7	F	F	85.0

^E High sampling variability; use with caution.

^F Sample size too small to produce reliable estimate.

* Statistically significant difference from reference group (currently married) marked in italic ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2001.

Current marital status (2001)	Ever-married: At least 3 times	
	Total	Married
Both sexes (000s)	137	98
Men	67	56
Women	70	41 ^E
Age of respondent at start of third marriage		
Both sexes	45.6	46.2
Men	47.5	48.5
Women	43.9	43.2 ^E
Age difference between respondent and third spouse		
Both sexes	7.2	7.4
Men	7.8	8.0
Women	6.5	6.6 ^E
Average duration of third marriage (years)		
Total	7.1	8.1
Still married	8.3	8.3
To divorce or separation	3.7 ^E	..
To death of spouse	F	..
Marital status of third spouse before entering into third marriage (%)		
Total	100.0	100.0
Widowed	F	F
Divorced	54.4	57.8
Single	F	F
Respondent lived common-law with third spouse before marrying		
Total	100.0	100.0
Yes	37.8 ^E	39.5 ^E
No	23.4 ^E	F
Have never lived common-law	38.9 ^E	40.3 ^E
Reason for end of third marriage		
Total	100.0	100.0
Still married	71.1*	100.0
Divorced or separated	22.9 ^E	..
Death of spouse	F	..

^E High sampling variability; use with caution.

F Sample size too small to produce reliable estimate.

* Statistically significant difference from reference group (currently married) marked in italic ($p < 0.05$).

Note: Divorced and widowed persons are not included due to very small sample size.

Source: Statistics Canada, General Social Survey, 2001.

	Ever-married		
	Once	Twice	Three or four times
(percent distribution downwards)			
For me to be happy, it is ... to have a lasting relationship as a couple			
Very important	72.0	69.1*	57.8*
Important	23.0	22.1	30.6
Not very important	3.5	6.0*	F
Not at all important	1.5	2.8 ^{E*}	F
For me to be happy, it is ... to be married			
Very important	55.6	50.5*	42.2*
Important	26.0	25.7	26.8 ^E
Not very important	12.7	16.3*	22.1 ^{E*}
Not at all important	5.6	7.5*	F
For me to be happy, it is ... to have at least one child			
Very important	60.8	59.4	46.2*
Important	28.2	29.6	33.4
Not very important	7.1	11.0*	F
Not at all important	4.0	6.1*	F
If I had young children under 15 and my marriage was in trouble and the differences with my spouse could not be resolved, I would still stay in the marriage for the sake of the children¹			
Yes	46.7	30.7*	25.7 ^{E*}
No	34.7	57.9*	67.1*
Do not know	18.6	11.4*	F
Religious affiliation			
No religion	13.9	16.5*	23.6 ^{E*}
Catholic	43.6	31.7*	17.2 ^{E*}
Protestant	25.8	36.5*	34.2
Orthodox	1.5	1.3 ^E	F
Jewish	1.0	F	F
Other Eastern religions	4.3	2.0 ^{E*}	F
Other, Do not know	9.8	10.8	22.6 ^{E*}
Religious attendance²			
Weekly	29.5	19.3*	29.8 ^E
Monthly	13.5	11.5	F
Occasionally	22.3	23.2	F
Yearly	8.0	10.0	F
Not at all	26.7	36.0*	39.3*

^E High sampling variability; use with caution.

F Sample size too small to produce reliable estimate.

1. Asked only of respondents who were still married at the time of the survey.

2. Asked only of those who reported having a religious affiliation.

* Statistically significant difference from reference category (ever-married once) marked in *italic* ($p < 0.05$).

Note: Totals may not add to 100 due to rounding.

Source: Statistics Canada, General Social Survey, 2001.



SOCIAL INDICATORS

	1998	1999	2000	2001	2002	2003	2004	2005
Labour force								
Labour force ('000)	15,316	15,588	15,847	16,110	16,579	16,959	17,182	17,343
Total employed ('000)	14,046	14,407	14,764	14,946	15,310	15,672	15,947	16,170
Men	7,613	7,797	7,974	8,036	8,184	8,348	8,481	8,595
Women	6,433	6,610	6,790	6,910	7,126	7,324	7,466	7,575
Workers employed part-time (%)	18.8	18.4	18.1	18.1	18.8	18.9	18.5	18.3
Men	10.5	10.3	10.3	10.5	11.0	11.1	10.9	10.8
Women	28.6	27.9	27.2	27.0	27.7	27.9	27.2	26.8
Involuntary part-time	27.8	25.5	24.4	24.9	25.5	26.5	26.2	25.0
Looked for full-time work	8.7	7.8	6.5	6.7	7.0	7.9	7.5	6.8
% of women with a child under 6 employed	61.2	62.6	63.2	63.7	64.5	65.1	66.6	67.2
% of workers who were self-employed	17.1	16.9	16.1	15.2	15.1	15.3	15.4	15.5
% of employed usually working over 40 hours per week	17.4	16.8	16.4	15.9	15.2	15.1	15.8	15.9
% of workers employed in temporary/contract positions	9.8	10.0	10.5	10.8	11.0	10.5	10.8	11.1
% of full-time returning students employed in summer	52.2	51.5	54.6	54.2	57.5	57.4	55.8	54.9
% of full-time students employed during the school year ¹	32.9	34.8	37.0	37.0	38.3	39.2	38.8	38.5
Unemployment rate (%)	8.3	7.6	6.8	7.2	7.7	7.6	7.2	6.8
Men aged 15-24	16.6	15.3	13.8	14.5	15.3	15.3	14.9	14.2
25-54	7.2	6.5	5.7	6.3	6.8	6.6	6.1	5.8
Women aged 15-24	13.6	12.7	11.4	11.1	11.7	11.8	11.7	10.6
25-54	6.9	6.3	5.8	6.0	6.2	6.3	5.9	5.7
By education level								
High school or less	11.3	10.3	9.4	9.7	10.3	10.2	9.7	9.1
Postsecondary certificate or diploma	6.5	5.9	5.2	5.8	5.9	5.8	5.6	5.3
University degree	4.3	4.2	3.9	4.6	5.0	5.4	4.9	4.6
Education								
Total enrolment in elementary and secondary schools ('000)	4,924	4,937	4,945	4,934	4,928	4,905	4,840	..
Secondary school diplomas granted ('000)	164.9	166.6	282.8	282.8	290.2	308.7	287.0	..
Postsecondary enrolment ('000)								
Community college, full-time	403.5	408.8	..	..	..	..	..	..
Community college, part-time	91.4	85.4	..	..	..	..	..	..
University, full-time	580.4	593.6	607.3	635.6	675.5	735.6	..	..
University, part-time	246	254.9	243.2	251.1	258.4	254.8	..	..
Educational attainment of 25- to 54-year olds (% distribution)								
Less than high school graduation	17.8	17.1	16.0	14.9	14.3	13.4	12.9	12.2
High school graduation	20.7	20.8	21.1	20.7	20.9	20.1	20.1	20.3
Some postsecondary	8.1	7.9	8.2	7.8	7.7	8.1	8.0	7.0
Postsecondary certificate or diploma	34.0	34.0	33.6	34.9	34.9	35.3	35.8	36.0
University degree	19.5	20.2	21.0	21.7	22.2	23.1	23.3	24.4

1. 15- to 24-year-old students.

Sources: Statistics Canada, Labour Force Survey and Centre for Education Statistics.



LESSON PLAN

Suggestions for using *Canadian Social Trends* in the classroom

"Taking charge: Perceptions of control over life chances"

Objectives

- To consider what "mastery" means and how it may differ between individuals.
- To understand why feeling in control of one's life may influence one's future.

Curriculum areas: social studies, family studies, communications, life skills

Classroom instructions

1. Read "Taking charge: Perceptions of control over life chances." Why is mastery important and what contributes to a sense of mastery? In what circumstances do you think that having a lot of control is useful? What do you think may happen to people who don't believe they can change the important things in their lives?
2. One theme that emerges from this study is "reciprocity," the idea that a person's sense of mastery may be created and sustained in a kind of feedback loop. It seems that you need to be successful to feel in control of your life, but you may also need to feel in control of your life to be successful. Do you think this is true? If it is, does this mean that "acting" or "playing a part" is an important element of mastery?
3. The article shows that young people record some of the highest scores on the mastery scale. Yet adolescence is often a time when people feel most vulnerable to the actions and opinions of other people. How would you explain the high sense of mastery expressed by Canadians in their late teens?
4. Canadians born abroad have lower mastery scores than Canadians who were born here. The article suggests that immigrants may feel less in control of their lives because they may have difficulty integrating into the labour market. But other factors may also sap their confidence, such as poor language skills, social isolation or even cultural traditions and expectations. How can recent Canadian immigrants be helped to improve their belief that they control events in their lives?
5. When people are really happy, they may say they feel like "the king of the world." The article finds that the happier people are, the higher their mastery scores. Make a list of sayings and expressions that people use to describe their feelings, and see how many of them reflect the characteristics associated with a sense of mastery.

Using other resources

See Teacher Resources by Subject at www.statcan.ca/english/edu/teachers.htm

Educators

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Court referrals for a group of youth and young adults

by Anthony Matarazzo

This article has been adapted from the report "Court Careers of a Canadian Birth Cohort" which is part of the *Crime and Justice Research Paper Series*. For a full list of references, please see the original report which is available free at www.statcan.ca/english/research/85-561-MIE/85-561-MIE2005006.htm.

In 2005, a violent upsurge in deadly shootings took the lives of 52 people in Toronto. The worst attacks took place in the summer and fall, in what residents now call "The Summer of the Gun." Many of the suspects, as well as their victims, were teens or young adults. On Boxing Day, a running gun battle between young members of rival gangs on Toronto's busy Yonge Street killed one 15-year-old shopper and wounded six other passers-by.¹ In May 2006, a 12-year-old in Alberta and her 23-year-old boyfriend were charged with first-degree murder in the deaths of her parents and younger brother.

As horrifying as these crimes by young people are, they are so rare that they fall completely outside the range of normal adolescent criminal behaviour. Most of the offences committed by teenagers can be considered part of growing up – acting out, testing limits, trying to win the approval of peers. In fact, the rambunctious behaviour of teenagers has chafed at adults in every generation.

One of the most basic questions about juvenile delinquency is actually the most difficult to answer. What percentage of young people actually commits crimes? Only by knowing the extent of the problem can authorities

develop effective solutions that protect society without throwing away the future of an immature offender.

Through self-report surveys, which rely on respondents to admit to any criminal acts, it appears that adolescent involvement in minor 'illegal' behaviour is fairly widespread, but that few are brought to the attention of the police or referred to court for formal processing. For the majority of these young people, this behaviour is temporary and very few go on to become persistent and serious offenders.²

Official data, on the other hand, suggest that a small segment of the youth population has formal contact with criminal justice authorities and that an even smaller proportion is responsible for the majority of criminal activity. Unlike self-report delinquency, official crime data measures illegal behaviour which has first been detected, then reported to authorities, and subsequently dealt with—formally or informally—by the police or courts. As such, these data may be best seen as providing valuable and necessary information on the response of the criminal justice system to illegal activities, as opposed to actual levels of crime in society.

This article examines involvement with the court system of young Canadians born between April 1979 and March 1980. It identifies how large a proportion of them were referred to court and the type of offence with which they were charged. Using data from the Youth Court Survey and the Adult Criminal Court Survey, it follows them as they moved from youth to young adulthood—that is, from age 12 to 21, inclusive.

Almost one in five individuals referred to court by age 21

Almost one in five (18%) Canadians born between April 1979 and March 1980 were referred to youth court or adult criminal court in relation to offences they committed before their 22nd birthday. Males comprised the vast majority of the group of 59,000 offenders and were almost four times more likely to be referred to court, at 28% compared with only 8% of females over the 10-year period.

Of these young individuals who appeared before a judge, 72% were found guilty of the offence with which they were charged. This rate of conviction also varied considerably between the sexes, with nearly three-quarters (74%) of males but 61% of females being found guilty.

While these estimates must be compared with those from other studies with caution, the *overall* prevalence rates for this birth cohort are consistent with those reported in similar studies conducted in Denmark, England, New Zealand, Sweden, and the United States.³

How old are young people committing their first offence?

The relationship between age and crime has become a "staple" in criminological research. Many studies have revealed a pattern that shows a sharp

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Just under one in five members of the study cohort appeared in court at least once during the period 1991 to 2001

Birth cohort (April 1, 1979 to March 31, 1980)

	Population *	Number referred to court	% referred to court
Total	323,328	59,000	18
Male	165,900	46,909	28
Female	157,428	12,091	8

* These figures represent the estimated number of 21-year-olds in the six provinces in 2000/01.
Sources: Statistics Canada, Youth Court and Adult Court Statistics, 1991 to 2001; Annual Demographic Statistics, 2003.

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What you should know about this study

This study uses the Youth Court Survey and the Adult Criminal Court Survey to trace the path through the court system of all people born between April 1, 1979 and March 31, 1980. Individuals are included in the study population if they had been charged with at least one federal statute offence that was referred to court between April 1, 1991 and March 31, 2001. The data cover six provinces which collectively account for about 78% of Canada's youth population: Newfoundland and Labrador, Prince Edward Island, Quebec, Ontario, Saskatchewan, and Alberta. Manitoba and British Columbia are excluded from the study because they did not provide the adult court data which is necessary to follow the birth cohort to age 21.

Referral

The term "referral" signifies offences being brought to youth court or adult criminal court which occurred on the same date, whether or not there was a finding of guilt. As such, the terms "offence" and "offenders" used throughout this article refer to offences allegedly committed and alleged offenders.

Study population

Using the court survey data, one cannot track exactly the same group of individuals for ten years—from their 12th birthday up to their 22nd birthday. However, population data by province for each age and sex may be used to estimate the size of the birth cohort for each year as the individuals aged from 12 to 21 years old. For calculating overall prevalence rates, the study used the largest approximate population (the number of 21-year-olds in 2000) as its base; age-specific

rates, on the other hand, simply used yearly population data to determine the approximate population of each corresponding age group.

Classification of offences

Offences are classified into four groups—against the person, against property, against the administration of justice, and other — according to the nature of the most serious charge resulting from the incident. The most serious charge representing the case being referred to court is classified using a seriousness scale developed by the Canadian Centre for Justice Statistics, Statistics Canada. Readers should note that this classification procedure may result in the number of less serious offences being underestimated.

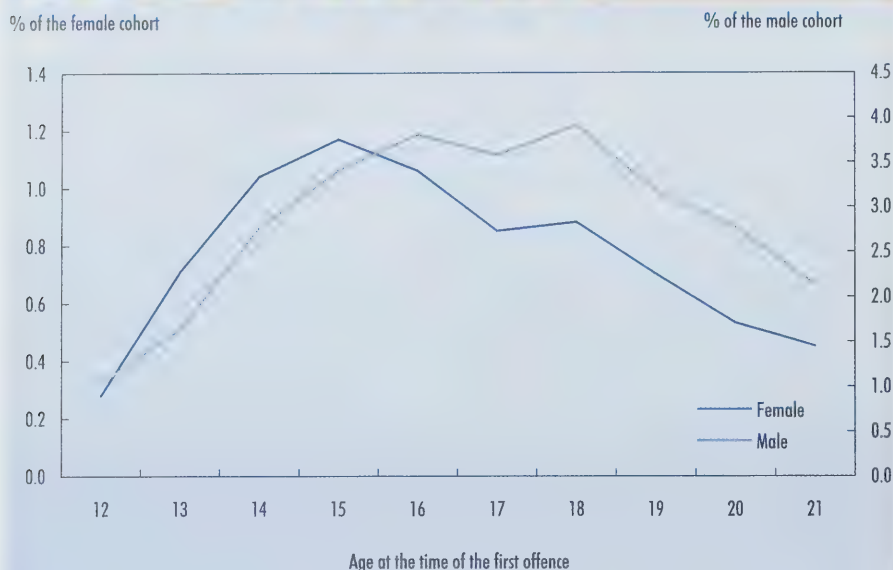
Offences against the person: This category includes homicide, attempted murder, robbery, sexual assault, other sexual offences, major and common assault, uttering threats, criminal harassment and other crimes against the person.

Offences against property: This category includes theft, break and enter, fraud, mischief, possession of stolen property, and other property crimes.

Offences against administration of justice: This category includes failure to appear, breach of probation, unlawfully at large, failure to comply with an order, offences under the *Young Offenders Act*, and other administration of justice offences.

Other offences: This category includes weapons offences, prostitution, disturbing the peace, residual Criminal Code offences, impaired driving and other Criminal Code traffic offences, drug possession, drug trafficking and other federal statute offences.

Males were almost four times more likely than females to be referred to court



Note: Female axis has been scaled up to highlight differences in male/female age-related prevalence rates

Source: Statistics Canada, Youth Court Survey and Adult Criminal Court Survey, 1991 to 2001; Annual Demographic Statistics, 2003.

increase in offending activities during early adolescence, with a marked peak in the mid- to late-teen years; this is then followed by a steady decline into adulthood.⁴ When using official court data, the relationship between age and crime may be presented in two different ways – *age-at-onset* and *age-specific prevalence* – depending on the research objective. Age-at-onset identifies the age of the individual at the time of the offence which led to their first court referral; age-specific prevalence highlights each age at which individuals were involved in an incident which resulted in charges being referred to court.

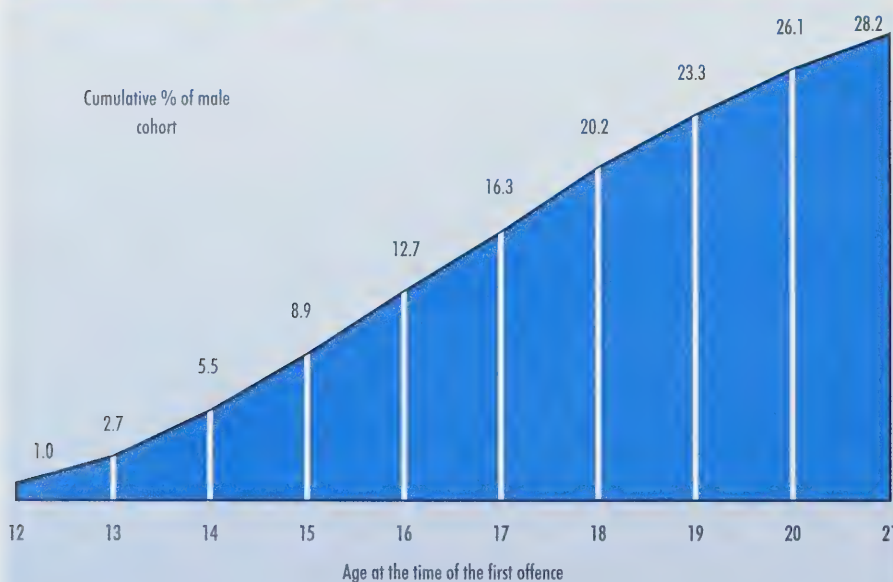
While the overall pattern of age-at-onset for both males and females resembled the general age-crime curve reported in most studies, this pattern varies between the sexes. Among males in the study cohort, the number committing a first offence leading to a court referral increased continually up to the ages of 16 to 18. This onset peaked at 18, when approximately 4% of male cohort members became first-time offenders.

For females, on the other hand, there was a much sharper increase in the number of first-time offenders at younger ages and a much earlier peak occurring at age 15. At that age, approximately 1% of the female cohort was involved in an incident that led to their first court referral. The female pattern of onset then drops substantially as it seems the maturation process reduces this type of behaviour.

Four out of ten cohort members appeared in court after age 18

The majority of individuals in the cohort committed their first offence between the ages of 12 and 17. There were, however, a substantial number of individuals referred to court for the first time at older ages. The literature, generally based on self-report or police data, widely reports that criminal offending usually begins in childhood or early adolescence.

More than 4 in 10 male cohort members who were referred to court first appeared after their 18th birthday



Source: Statistics Canada, Youth Court Survey and Adult Criminal Court Survey, 1991 to 2001; Annual Demographic Statistics, 2003.

However, this is not borne out when official court data on referrals and warnings is examined.

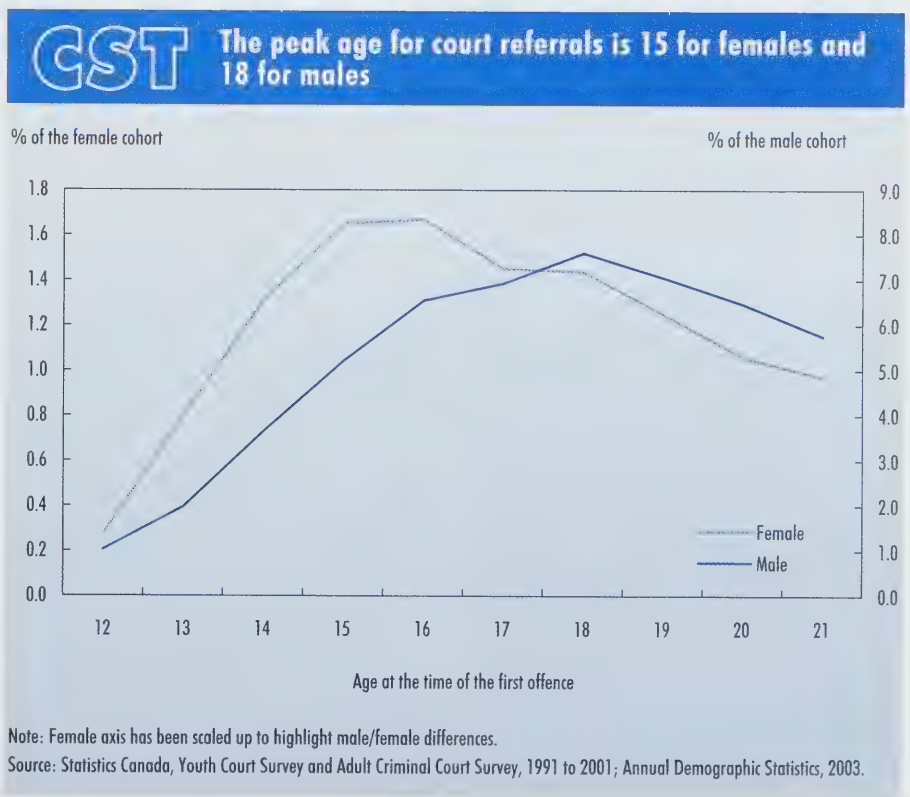
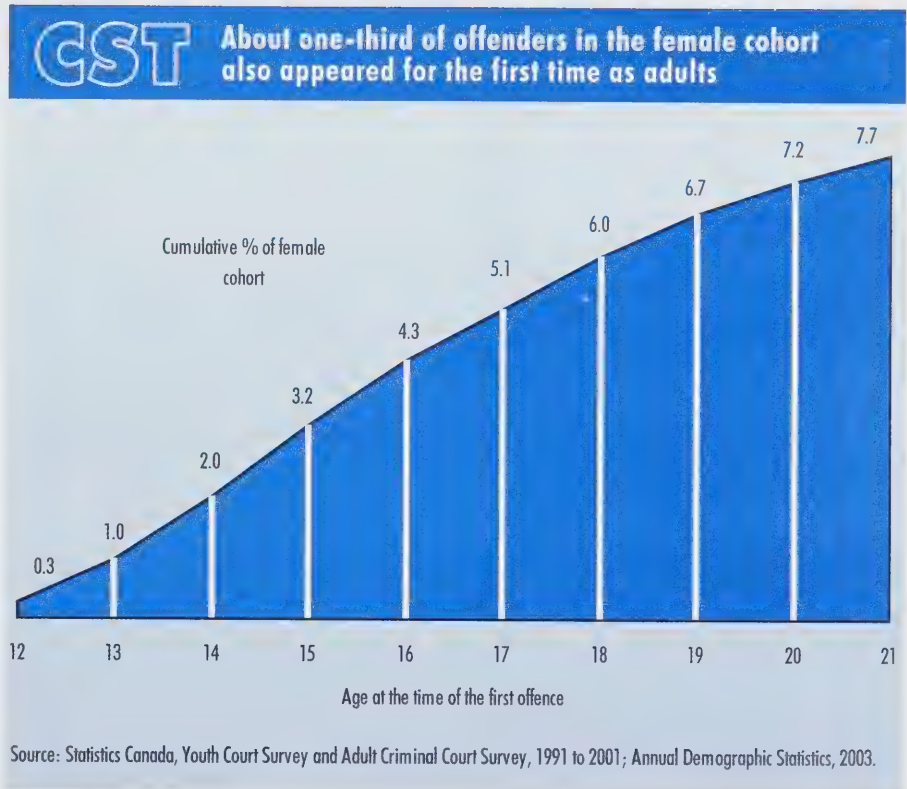
Four out of ten cohort members who were referred to court first went into the system after an incident which occurred after their 18th birthday. This pattern varied between the sexes with 42% of male onset and 34% of female onset occurring after this time. Both of these rates, however, would be considerably higher if cohort members could have been tracked later into adulthood.

This overall pattern may reflect, in part, a tendency for police, prosecutors, and other screening agencies to deal with alleged offenders younger than 18 by means other than the formal court process. Sections of the *Young Offenders Act* specifically encouraged authorities to use alternatives to the formal court process in jurisdictions when it was possible. These alternatives often relied on police discretion to use such measures as warnings, cautions and referrals to community programs. These types of extrajudicial measures allowed for early intervention with young people while reducing the burden on the courts and corrections facilities.

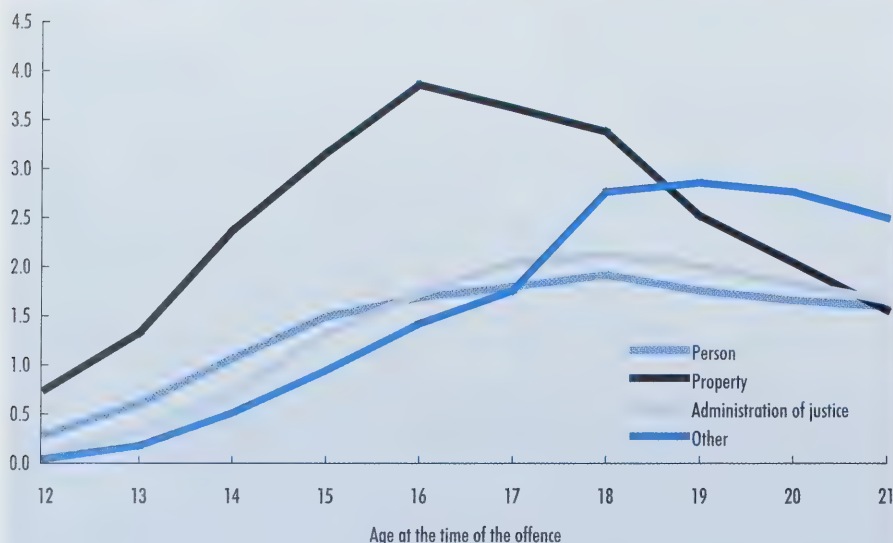
Most young people referred to court for property-related crimes

As with age-at-onset, the overall rates of referral to court at each specific age also resembled the commonly reported age-crime curve. The patterns of referral are similar for males and females, except that prevalence for females rises relatively faster at young ages and peaks earlier at the age of 16, when 1.7% of the female cohort was referred to court. In contrast, the peak age of prevalence for males in the cohort (7.6%) was 18 years.

Up to the age of 16, more males and females are referred to court for property-related incidents than for any other type of offence. The rate then falls quite sharply. (See "What



% of the male cohort



Source: Statistics Canada, Youth Court Survey and Adult Criminal Court Survey, 1991 to 2001; Annual Demographic Statistics, 2003.

you should know about this study” for a list of crimes included in each offence category.)

For males, rates of referral to court for offences against the person and against the administration of justice increase slowly up to age 18 and then remain relatively stable into adulthood. Rates for other related offences, on the other hand, peaks at age 19 when the rate is almost twice as high as those for the remaining categories. This jump may be due partly to the police being less lenient with adults than with adolescents, and partly to higher rates of drinking-driving offences among 18- to 21-year-olds.

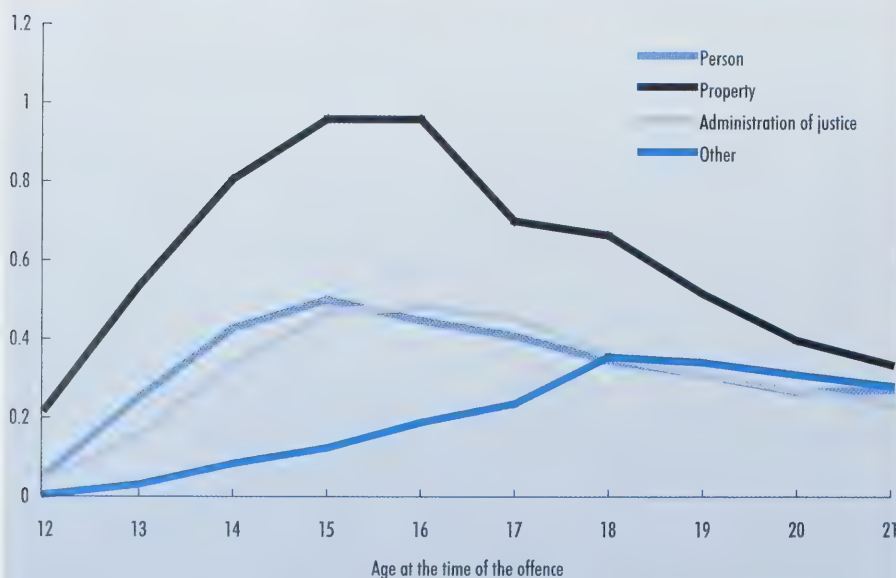
In contrast, females continue to go to court mainly for property-related offences until age 21, at which time the likelihood of referral for each type of offence is approximately equal. The rate of referral for an incident involving an offence against a person also peaks three years earlier for female (age 15) than for male cohort members.

Summary

As teenagers make the transition into early adulthood, many may be involved in behaviour which could be considered “law-violating”. For many, however, this behaviour goes undetected and simply represents a regular part of “growing up”. For others, not only is this behaviour detected but it is also reported, marking their first contact with the formal criminal justice system and setting a different pathway in this *life course* transition.

For most young people, these contacts are for very minor types of infractions and are often isolated to the early years of adolescence. Prevalence rates of court referral provide some indication of the nature and extent of these behaviours, and highlight the “size of the problem” from the perspective of the criminal justice system. More importantly, however, they also highlight the number of young lives in which

% of the female cohort



Source: Statistics Canada, Youth Court Survey and Adult Criminal Court Survey, 1991 to 2001; Annual Demographic Statistics, 2003.

Canadian courts have an opportunity to intervene and set back onto the right path to adulthood.

CST

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1. <http://www.canadafreepress.com/2005/toronto123005.htm>. Accessed May 18, 2006.
2. Le Blanc, M. and M. Fréchette. 1989. *Male Criminal Activity from Childhood Through Youth: Multilevel and Developmental Perspectives*. New York: Springer-Verlag.
3. Comparisons of prevalence estimates must be made with caution because studies differ in many ways: for example, the historical period when the population was observed, the period of their lives when the population was observed, the indicator of criminal behaviour which was used (e.g. police contact, arrest, apprehension, or charging; referral to court, or conviction), the range of illegal behaviour which was included (e.g. traffic violations, juvenile status offences such as truancy, etc.) and the juvenile and criminal justice process in effect in the jurisdiction(s) studied—particularly the screening and diversion practices for young persons, which might significantly reduce official reports of offending.
4. Piquero, A.R., D.P. Farrington and A. Blumstein. 2003. "The criminal career paradigm." *Crime and Justice. A Review of Research*. Vol. 30. M. Tonry (ed.).

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When is junior moving out? Transitions from the parental home to independence

by Pascale Beaupré, Pierre Turcotte and Anne Milan

Children obtain most of their early socialization at home with their parents, where they acquire the experiences and ideas that will influence their adult years.¹ Consequently, leaving the parental home is a significant event for both parents and children. For the parents, it may represent relief, pride in having fulfilled their parental role, and joy at seeing their children move towards greater independence. For the children, the first departure is a symbolic marker as they make the transition from youth to adulthood.

However, there has been a substantial increase in children still living at home long past the age when their parents expected them to leave. The largest growth has occurred among young adults in their late 20s or early 30s: between 1981 and 2001, the proportions doubled from 12% to 24% for those aged 25 to 29 and from 5% to 11% for those aged 30 to 34.²

Most of this increase took place during the early 1980s and early 1990s, years during which Canada endured two of the most severe labour recessions since the 1930s. Given the context, it does seem fair to ask whether young adults are really taking longer to leave the nest than their parents did.

This article uses data from the 2001 General Social Survey (GSS) to examine patterns in leaving the parental home. It compares the transition process for five birth cohorts, with the focus on Wave 1 Boomers (born 1947-56) and Generation X (born 1967-76). The differences in patterns of leaving the parental home are examined, and then the principal factors associated with a young person's initial departure from home are identified.

More children staying home longer

According to the 2001 GSS, only 87% of Generation X had left the parental home at least once and (as expected) almost all of Wave 1 had done so. Of course, leaving the parental home does not preclude a child from returning, but the transition of Wave 1s seems relatively smooth compared with Gen Xers. About 14% of Wave 1 Boomers returned home after their first attempt at leaving, while almost one-quarter (22%) of Gen Xers had boomeranged.

Using life-table estimates, it is possible to examine the changes across generations in the timing of children's first departure from the parental home. Younger Wave 1 male

Boomers (born 1952-56) had a 59% probability of leaving by age 21, compared with 46% for younger Generation X males (born 1972-76). On the other hand, older Gen Xers had a higher likelihood of leaving by age 21 than older Wave 1s (born 1947-51), at 53% versus 49%. (Table of cumulative probabilities for all cohorts in Table A.1.)

Women tended to leave home earlier than men, largely because they marry or cohabit at younger ages³, and in this study, this was especially the case for women in the older cohorts. There was a two-thirds probability that both older and younger Wave 1 women had first launched before turning 21; the probability dropped to 59% and then 55% for older and younger Generation X women. (See Table A.1.)

Of course, economic conditions had changed considerably between the time that Wave 1 quit the nest and the time that Gen X was expected to leave. Well-paying unionized jobs were not nearly as plentiful, and real wages for young workers had fallen, reducing the incentive and opportunity for independence. (See "It's a wild world: Changing labour market conditions after the postwar boom").

GST What you should know about this study

This study is based on data from the 2001 General Social Survey (GSS) on family history. The GSS interviewed 24,310 individuals aged 15 and over, living in private households in the 10 provinces. One section of the survey collected data on the number of times respondents left the parental home and their age at the time of each of these events. Information about first and last departure allows the process of "launching from home" to be examined for several generations of Canadians. This study is based on individuals aged 15 to 69 in 2001.¹

Five birth cohorts are examined, with the text focusing on Wave 1 Boomers and Generation X:

Generation Y – born between 1977 and 1986, and 15 to 24 years old at the time of the survey;

Generation X – born 1967 to 1976, aged 25 to 34;

Wave 2 Boomers – born 1957 to 1966, aged 35 to 44;

Wave 1 Boomers – born 1947 to 1956, aged 45 to 54; and

War/Depression generation – born 1932 to 1946, aged 55 to 69 at the time of the 2001 GSS.

The process of leaving home is analysed in two steps. First, life-tables are used to calculate the cumulative probabilities that highlight the differences in the intensity and timing of home-leaving between cohorts. Second, event history analysis is used to identify the demographic and socio-economic factors associated with the home-leaving process. These factors are presented as risk ratios. Involuntary departures (such as parental deaths) and all departures before age 15 are excluded from this analysis.

Launch: A child's first departure from the parental home to live independently. If the child does not return, the launch is described as successful.

Boomerang: A child's return to the parental home after a period of living independently (usually assumed to be a minimum of four months in many studies).

Risk ratio: Ratio of the estimated probability of an event occurring (e.g., leaving home for the first time) versus the estimated probability of the event occurring for a reference group. For example, if the probability of leaving home for the first time at age 21 was 20% for Wave 1 Baby Boomers and it was 10% for the reference cohort (say, the War/Depression generation) after controlling for all other variables in the model, then the risk ratio would be 2.0. Risk ratios over 1.0 indicate a higher risk associated with that characteristic, compared to the reference group; a risk ratio less than 1.0 indicates a lower risk.

The risk ratios were calculated based on a proportional hazard model using the following explanatory variables: birth cohort; family environment when the respondent was age 15 (family composition, number of siblings, mother's and father's main activity, mother's birthplace); the respondent's place of residence when he or she was 15 (region/province, size of town/city); and the level of education the respondent had obtained by the time he or she first left the parental home; and the respondent's employment status at the time of first departure. Separate models were run for men and women.

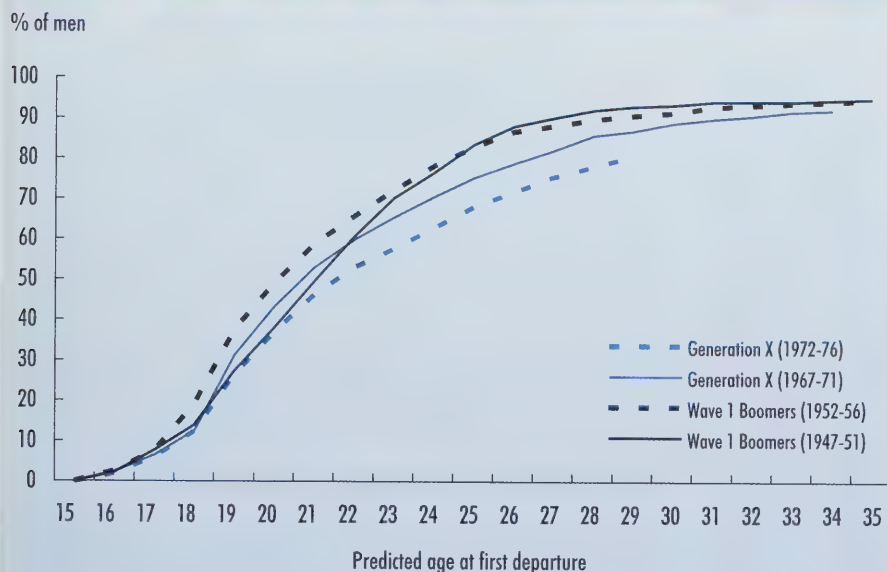
1. Based on respondents' interpretation and recollection of the age at which they first left home.

The reasons for leaving the parental home have also changed. Most young adults today move out voluntarily to pursue educational or employment opportunities, or simply live independently of their parents. However, studies have consistently found that children who leave home for these reasons are significantly more likely to boomerang than those who leave to marry and set up their own conjugal household.⁴

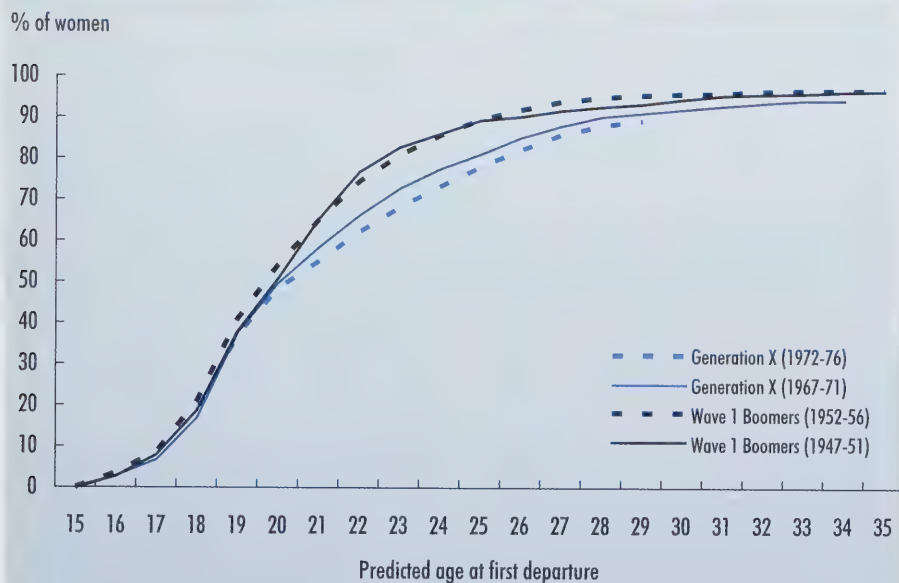
Birth cohort a key predictor of leaving home earlier

Researchers have been examining the path to independence for many years, and have identified a number of important influences on the transition from the parental home to independence. A wide variety of factors unique to the individual and the family play a role, of course; on the larger stage, general economic conditions, jobs opportunities, family financial pressures and regional diversity are also linked.⁵

Exactly how old a young person is when he or she first leaves the parental home depends on their unique situation. However, a risk ratio calculated using a proportional hazard model can estimate the probability that a person's first departure will occur at a younger or older age than a reference individual, when all other factors are controlled for. (See "What you should know about this study" for the list of variables included in the model.)



Source: Statistics Canada, General Social Survey, 2001.



Source: Statistics Canada, General Social Survey, 2001.

Earning a living is a key step to independence, so the state of the economy plays an important role when a young person is deciding whether to leave home. Reaching adulthood in a good or bad job market is entirely an accident of birth, and it is not surprising that young men from Generation X had a 16% lower probability of an early first departure than men in the War/Depression cohort. Similarly, women had a 12% lower risk of leaving home at a given age if they belonged to Gen X than to the 1932-46 cohort, which reached adulthood during the economic heyday of the 1950s and 1960s, while the younger cohort faced the difficult labour market of the 1990s.

Non-traditional and large families encourage earlier first departure

Children who experience family disruption during their childhood generally leave home earlier, probably as a way to deal with difficult relationships or other problems in the family.⁶ This seems to be especially true of women. When all other variables are controlled for, women who spent at least part of their childhood in a step-family had a 57% higher risk of leaving at a younger age than women who grew up in an intact family (both biological parents present). Men raised in a step-family also had a greater likelihood of leaving home earlier, but the increased risk (30%) was substantially lower than for women from step-families. In short, the presence of a step-parent seems to encourage young adults to leave home at an earlier age.

Generally, young people who leave home before age 18 due to an unstable family situation may not feel they have the option of returning home if they need help. This tends to expose premature leavers to having lower educational attainment, poorer labour market attachment and associated difficulties. In contrast, staying in a stable home environment after age 25 can provide a child with

Respondent characteristics	Men	Women	Respondent characteristics	Men	Women
Risk ratios			Risk ratios		
Birth cohort			Religious attendance at age 15		
<i>War/Depression</i>	1.00	1.00	<i>Weekly</i>	1.00	1.00
<i>Wave 1 Boomers</i>	0.99	1.09	<i>Sometimes</i>	1.06	1.11*
<i>Wave 2 Boomers</i>	0.92*	0.95	<i>Never</i>	1.22*	1.27*
<i>Generation X</i>	0.84*	0.88*	Region of residence at age 15		
<i>Generation Y</i>	0.57*	0.58*	<i>Atlantic</i>	1.10*	1.18*
Family structure while growing up			<i>Quebec</i>	1.00	1.00
<i>Two-parent intact family</i>	1.00	1.00	<i>Ontario</i>	1.15*	1.10*
<i>Step-parent</i>	1.30*	1.57*	<i>Prairies</i>	1.54*	1.64*
<i>Lone-parent</i>	1.16*	1.22*	<i>British Columbia</i>	1.42*	1.50*
<i>Other</i>	1.13	1.69*	<i>Outside Canada</i>	1.09	1.06
Number of siblings			Size of city where respondent lived at age 15		
<i>Only child</i>	0.93	1.01	<i>Less than 5,000</i>	1.44*	1.80*
<i>One sibling</i>	1.00	1.00	<i>5,000 to 24,999</i>	1.36*	1.60*
<i>Two siblings</i>	1.06	1.07	<i>25,000 to 99,999</i>	1.27*	1.39*
<i>Three siblings</i>	1.20*	1.13*	<i>100,000 to 999,999</i>	1.10*	1.17*
<i>Four siblings or more</i>	1.26*	1.22*	<i>1,000,000 or more</i>	1.00	1.00
Main activity of mother when respondent was age 15			Level of schooling when respondent left home		
<i>Mother worked</i>	1.00	1.00	<i>Less than secondary</i>	0.92	1.12*
<i>Did not work</i>	0.88*	0.92*	<i>Had secondary diploma</i>	1.00	1.00
Main activity of father when respondent was age 15			<i>Postsecondary degree, certificate or diploma</i>	1.12*	0.94
<i>Father worked</i>	1.00	1.00	Employment status when respondent left home		
<i>Did not work</i>	1.34	1.32	<i>Did not work</i>	1.00	1.00
Birth place of mother			<i>Did work</i>	1.13*	1.03
<i>Mother born in Canada</i>	1.00	1.00			
<i>Born outside Canada</i>	0.69*	0.77*			

* Statistically significant difference from reference group (shown in italics) at $p < 0.05$.

Note: Risk ratios were generated with a proportional hazard model. Risk ratios over 1.0 indicate a higher risk associated with that characteristic, compared to the reference group; a risk ratio less than 1.0 indicates a lower risk.

Source: Statistics Canada, General Social Survey, 2001.

more resources to pursue a higher education or to build up savings, thus building a solid foundation for adult independence.⁷

Growing up in a large family also promotes being independent sooner rather than later. Men with three siblings had a 20% greater chance of moving out compared to someone the same age with only one sibling. Similarly, women had an 13% greater chance. And having four or more brothers or sisters at home increased the probability of leaving home earlier even more.

Parental employment linked to first launch

Having a mother who was not in the paid labour force during their adolescence seems to reduce the likelihood of moving out of the parental home, when all other factors are controlled for. Compared to people the same age whose mothers had worked outside the home, men had a 12% lower and women an 8% lower probability of leaving home if their mothers had not been employed when they were 15. However, the effect of having an unemployed father was not

statistically significant for either young men or women.

Mother's place of birth and the respondent's teenaged religious attendance habits influence home leaving

A young person's cultural background can influence the process of leaving home, and ethnicity and religious observance play significant roles. Researchers have noted that if a family has preserved some of the ethnic norms and preferences of a familistic culture intact, children tend

CST It's a wild world: Changing labour market conditions after the postwar boom

Economic conditions in Canada have changed substantially since the 1960s and early 1970s when the first wave of the baby boom left home. Many of these changes have effectively slowed the transition from adolescence to adulthood; indeed, in some instances, it is fair to say that they may have changed the definition of adulthood.

After the Second World War, demand for skilled labour increased and enrolment in postsecondary education skyrocketed. By 1971, 46% of the prime working-age population (aged 25 to 54) had more than twelve years of schooling, compared to 10% in 1951. Over the same period, the percentage with a university degree more than doubled from 2% to 5%.

Due in part to the rapidly improving educational levels of the workforce, the 1950s and 1960s produced the biggest earnings gains of the century in real terms – almost 43% and 37%, respectively. This was the job market into which the first wave of the baby boom graduated.

The labour market which greeted the second wave of the baby boom was considerably different. In 1973, the oil crisis catapulted the economy into a period of simultaneous high unemployment and high inflation. In the late 1970s, interest rates were increased sharply to beat down inflation. Economists generally agree that the resulting recession of 1981-82 was the most severe since the Depression.

By 1983, the economy was pulling out of recession and job growth accelerated. However, it became apparent that the position of workers under age 35 was worsening. In the late 1970s, the real earnings of young workers began to fall in Canada and other industrialized nations. Young men bore the brunt of this trend, although young women also experienced relative declines in earnings. So although the mid- to late-1980s are frequently remembered as years of

excessive conspicuous consumption, most young workers were comparatively worse off.

The recession of 1990-92 was not as severe as that 10 years before, but it lasted longer. Downsizing — the permanent elimination of jobs — was significantly higher, the recovery was slower to take hold, there was little full-time job creation until late in the decade, and wages remained flat.

In the 1990s, firms increasingly began to control their costs using non-permanent workers, and Gen X found itself looking for work in a job market that would probably be unrecognizable to their parents. Instead of hiring new employees, firms contracted their work out to other firms and self-employed individuals. This strategy effectively blocks work opportunities for young people, who are usually too inexperienced to successfully bid for contract work. In addition, even though unemployment rates remained above 10%, unemployment insurance regulations were tightened up and the new restrictions fell particularly hard on young people.

However, the 1990s ended with a strong economic recovery. Unemployment levels were lower than they had been for 10 years, income tax rates began to drop and disposable income started to rise faster than inflation.

Throughout these uneasy years, many young people stayed in school to improve their education and skills. But at the same time, postsecondary tuition fees more than doubled and governments offered students less grant assistance. Now more dependent on loans to pay for their studies, Gen Xers were entering the labour market with substantially increased debt loads.

- For more information, see "100 Years of Labour Force", *Canadian Social Trends* 57: 2-14; "100 Years of Education" and "100 Years of Income and Spending", *Canadian Social Trends* 59: 3-12.

to launch at older ages than those with British backgrounds.⁸ According to the GSS, men whose mother was born in a foreign country had a 31% lower probability of moving out early than men whose mother was Canadian-born; the probability for women was 23% lower.

The importance of family and kinship ties to people with strong religious beliefs has been well-documented,⁹ and respondents who often attended religious services in their youth might internalize these values. Certainly, compared with

respondents who had attended services once a week, individuals who had never attended as a teen were more likely to depart at a younger age: the probability was 22% higher for men and 27% higher for women, when all other factors are controlled for.

Westerners more likely to leave home early

Region of residence, especially during childhood, has an effect on patterns of leaving home because it tends to create, support or reinforce social norms. Compared to adults who spent at least part of their childhood in Quebec, people who grew up in any other province had a greater likelihood of launching early. The highest probabilities were recorded in the West: they were 64% greater for women and 54% greater for men who had grown up in the Prairies, and 50% and 42% greater, respectively, if they had lived in British Columbia as a teen. The differences were not as great in Ontario or Atlantic Canada, but the risk ratios were significantly higher compared to Quebec, when all other factors are controlled for.

Smaller towns prompt earlier departures from the nest

People raised in small towns (less than 5,000) had the greatest likelihood of leaving home, compared to those raised in cities with populations over one million. Women, especially, left small towns at a younger age. When all other variables are controlled for, they had an 80% greater probability of an early first departure, while men had a 44% greater likelihood. Even those who grew up in a mid-size city of 25,000 to 100,000 had a higher likelihood of leaving sooner.

Geography influences the cost of housing, job availability and access to higher education. Young adults in a very large city might delay moving out because the cost of setting up an independent household is prohibitive, while those from less urban areas may accelerate their first launch because they can only obtain education, employment or labour market skills in a bigger city.¹⁰

Men with higher education leave sooner

Education is also associated with an earlier first departure. Men who have at least some postsecondary education had a 12% higher chance of leaving the parental home than young men who were the same age but had only high school graduation. For women, the opposite is true; that is, women without high school had a 12% greater probability of leaving home at a younger age than those with secondary completion.

The literature generally suggests that having personal income is an important predictor of leaving home sooner rather than later.¹¹ The risk of leaving home at a younger age was 13% higher for employed than unemployed men whereas there was no statistically significant difference in risk between employed and unemployed young women.

Summary

Leaving the parental home is seen as an important event on the path to adulthood, although young adults today seem to delay leaving the nest. The exact timing of the first departure may be influenced by many factors, such as relationship formation, educational or employment opportunities, or expectations about establishing an independent household.

The GSS shows that those born during the early to mid 1950s left home earlier than later cohorts of young adults. In addition, young adults are more likely to leave home sooner rather than later if they spend at least part of their childhood in a non-traditional family, have more than two siblings, have a Canadian-born mother, did not attend religious

services during adolescence, live in a region outside Quebec and grow up in a smaller town.



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Table A.1 Cumulative probabilities of first leaving home for men and women

Age at first departure	Generation/Age in 2001 at time of survey/Years of birth cohort										
	Generation Y		Generation X		Wave 2 Boomers		Wave 1 Boomers		War/Depression		
	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69
	1982 to 1986	1977 to 1981	1972 to 1976	1967 to 1971	1962 to 1966	1957 to 1961	1952 to 1956	1947 to 1951	1942 to 1946	1937 to 1941	1932 to 1936
Men	probabilities										
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.7	2.3	1.9	2.5	3.2	2.9	2.6	2.2	3.3	3.5	4.8
17	2.7	5.1	6.1	6.5	6.9	7.1	7.5	7.6	10.2	9.6	10.4
18	6.5	10.1	12.4	12.6	16.6	13.5	19.0	13.9	16.4	16.5	21.1
19	11.9	20.4	26.4	31.4	33.4	29.0	37.5	27.3	30.5	27.8	33.4
20	...	28.4	37.1	43.3	44.1	41.1	49.0	38.0	39.5	39.7	39.9
21	...	34.7	46.3	53.0	52.4	51.2	58.6	49.4	51.8	47.4	50.8
22	...	42.2	53.0	60.0	61.1	58.9	65.6	60.5	60.5	55.4	60.5
23	...	48.9	57.7	65.4	69.2	65.0	72.1	70.1	69.8	64.3	67.2
24	...	53.6	62.9	70.5	73.8	71.1	78.1	76.3	74.8	70.5	74.5
25	...	...	68.1	75.2	78.3	75.8	82.8	83.3	79.3	77.0	79.4
26	...	...	71.7	78.8	83.5	80.6	86.5	87.9	85.3	83.9	84.0
27	...	...	75.5	82.1	86.2	83.3	88.0	90.0	87.3	86.9	87.3
28	...	...	78.0	85.7	88.9	86.7	89.5	91.9	89.9	88.8	91.2
29	...	...	80.7	86.9	91.0	88.5	90.6	92.8	91.7	90.2	92.6
30	...	...	...	88.8	91.7	89.4	91.3	93.2	92.8	91.5	93.6
31	...	...	...	89.9	92.4	90.5	92.8	94.1	93.0	93.8	94.6
32	...	...	...	90.7	93.4	91.0	93.2	94.2	93.7	94.5	95.2
33	...	...	...	91.7	94.2	91.3	93.7	94.2	94.5	95.5	96.4
34	...	...	...	92.2	94.5	91.9	94.2	94.6	95.0	96.0	96.6
35	...	...	...	...	94.8	92.2	94.6	94.8	95.1	97.0	96.6
Women	probabilities										
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	1.6	1.6	4.0	3.1	2.7	2.4	3.4	2.7	3.2	5.4	5.0
17	4.7	5.8	9.0	7.1	9.1	8.0	8.7	7.9	10.0	13.2	12.9
18	10.0	14.8	19.1	17.3	20.4	18.1	20.9	18.7	21.8	21.4	23.6
19	16.8	28.7	37.4	38.0	40.1	37.3	40.9	37.9	40.1	40.4	37.3
20	...	39.5	48.8	50.0	50.7	52.0	54.1	50.8	48.9	54.1	47.9
21	...	48.9	55.2	58.6	58.8	61.5	65.1	65.2	60.4	63.0	58.7
22	...	56.0	62.5	66.5	67.9	72.1	74.3	76.6	71.3	72.5	70.8
23	...	62.0	68.5	73.0	75.4	77.9	80.8	82.6	77.6	79.4	78.9
24	...	64.7	73.5	77.7	80.7	82.1	85.6	86.0	84.3	83.9	84.0
25	...	...	78.3	81.3	84.2	84.9	89.5	89.3	87.4	86.8	88.9
26	...	...	82.4	85.4	88.8	88.4	91.8	90.2	90.4	89.4	91.2
27	...	...	86.1	88.2	90.6	89.8	93.8	91.6	91.7	90.0	92.9
28	...	...	88.3	90.4	92.0	90.7	94.8	92.5	93.5	91.0	93.5
29	...	...	89.5	91.3	93.1	92.2	95.4	93.2	95.0	92.5	94.8
30	...	...	...	92.3	94.4	93.1	95.7	94.4	96.0	92.8	95.5
31	...	...	...	93.1	94.9	94.5	95.9	95.3	96.5	94.8	96.6
32	...	...	...	93.9	95.1	95.2	96.4	95.7	96.6	95.0	97.0
33	...	...	...	94.5	95.4	95.3	96.7	95.9	96.8	95.5	97.2
34	...	...	...	94.5	96.3	95.8	96.7	96.3	97.1	95.9	97.3
35	...	...	...	...	96.3	95.9	96.8	96.5	97.3	96.4	97.4

... not applicable

Source: Statistics Canada, Life tables generated from General Social Survey, 2001.



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Interreligious unions in Canada

by Warren Clark

Religion is only one of many characteristics that may be important in the search for a partner. As such it may be traded off for other desirable traits.¹ Friends and family may also influence the choice of a partner. In some religious groups a marriage outside the faith may be forbidden or only allowed if the outsider converts or promises to raise any children from the marriage in the partner's religion. In very secular societies where religious identity is weak, religion may be viewed as a matter of indifference in the selection of a partner.²

This article uses data from the Census of Population and the 2002 Ethnic Diversity Survey (EDS) to examine the prevalence of interreligious conjugal unions and the social and demographic factors associated with their occurrence. The EDS is used to create models of the probability that a person in a couple is in an interreligious union where the impact of all other socio-demographic variables in the model is removed except the one being examined.

Interreligious unions refer to marriages and common-law unions where partners are from different

broad religious groups. For example, if a husband is a Buddhist and the wife is a Roman Catholic, this union is considered to be interreligious because each partner is from a different broad religious group. However, unions between people of different denominations within the same broad religious group are not considered interreligious; for example, an Anglican/Presbyterian union is not interreligious as both partners are Protestants.

Nearly one in five Canadians in couples are in interreligious unions

Given declining religious affiliation and increasing cultural diversity, the number of interreligious unions has increased in Canada. In 1981, 15% of people in couples were in an interreligious union. By 2001, interreligious unions had grown to 19% of couples: of the 14.1 million Canadians in couples, nearly 2.7 million had a partner from a different religious group.³ Despite the increase in interreligious unions, most Canadian couples are homogamous unions where both partners are from the same broad religious group.

What was once incongruous, now accepted

Not surprisingly, over half of interreligious unions are between Catholics and Protestants, the two largest religious groups in Canada. The 1.3 million people in Catholic/Protestant unions represented 9.6% of all persons in couples in 2001, up from 8.6% in 1981. Increasing numbers of young Catholics and Protestants intermarry because of a commonly shared culture.

Catholic/Protestant unions are not evenly distributed geographically as the availability of same-faith partners has a negative effect on the frequency of interreligious unions. In Quebec, where 83% of the population is Catholic and only 5% is Protestant, only 2% of Catholics in couples are married to (or in common-law relationships with) Protestants. In Ontario, where there are nearly equal numbers of Catholics and Protestants, 18% of Catholics in couples are in interreligious unions with a Protestant. In Newfoundland and Labrador, where Catholics are outnumbered by Protestants, 25% of Catholics in couples are in interreligious unions with a

	1981	1991	2001		
Religious group			Both sexes	Men	Women
% of population in couples who are in interreligious unions					
Total	15	17	19	19	19
No religion	38	27	25	32	17
Catholic	12	14	16	15	17
Protestant	14	17	21	19	23
Mainline Protestant ¹	15	19	23	21	25
Conservative Protestant ²	9	11	13	11	15
Other Protestant	15	22	25	23	27
Orthodox Christian	23	25	26	27	24
Christian n.i.e.	19	18	18	15	20
Muslim	13	11	9	11	6
Jewish	9	12	17	19	16
Buddhist	19	16	19	16	22
Hindu	11	10	9	9	8
Sikh	4	4	3	4	3
Other Eastern religions	26	24	27	25	29
Other religions ³	41	41	46	40	50

1. Mainline Protestant includes Anglican, Lutheran, Presbyterian, United Church.

2. Conservative Protestant includes Baptist, Pentecostal, Nazarene, Evangelical Free, Mennonite, Salvation Army, Reformed, Christian and Missionary Alliance and other smaller groups.

3. Other religions includes New Age, Aboriginal Spirituality, Pagan, Scientology, Satanist, Wicca, Gnostic, Rastafarian, Unity, New Thought, Pantheist and other small religious groups.

Note: Protestant breakdown is based on definitions by Nock, David A. 1993. "The organization of religious life in Canada." in *The Sociology of religion – A Canadian Focus*, edited by W.E. Hewitt, Toronto: Butterworths; and Bibby, Reginald W. 1987. "Fragmented Gods, The Poverty and Potential of Religion in Canada." Toronto: Stoddart Publishing Co. Ltd.

Source: Statistics Canada, Censuses of Population.

Protestant. This data illustrates that interreligious unions are related to the degree of religious homogeneity of the population; when the population is relatively homogeneous, there are few opportunities for majority religious groups to marry outside their group, and few opportunities for minority religious groups to marry within their group.⁴ (Table A.1)

Conservative Protestants less likely to be in interreligious unions

Religious groups that are more traditional in religious doctrine have higher levels of involvement in their religious community and are less likely to be in interreligious unions.⁵ Conservative Protestants⁶ are more likely to have high religiosity and are

less likely (13%) to be in interreligious unions than Mainline Protestants⁷ (23%) or Catholics outside Quebec (27%).

More interreligious unions with "no religion" spouse

Generally, interreligious couples find it easier if one or both partners do not possess strong religious convictions or if one party is willing to convert. Men are less religious and are more likely to report "no religion" than women. The imbalance of potential partners with "no religion" means that men with no religious affiliation are more likely to be in interreligious unions than women are.

As the percentage of the population with "no religion" has grown to 17% in 2001 from 7% in 1981, interreligious

unions where one partner professes "no religion" has decreased to 25% in 2001 from 38% in 1981 as the availability of potential "no religion" partners has increased. It is not surprising that the second and third largest interreligious unions groups in 2001 now involve a "no religion" partner with a Catholic or Protestant. Since 1991, the number of Catholic/no religion unions have increased by 52% while Protestant/no religion unions have increased by 18%. As "no religion" is more common among young adults, these interreligious unions are predominantly young couples. People who report a religious affiliation, but have lower levels of religiosity are more likely to select a partner with "no religion" than someone with higher levels of religiosity.

Sikhs, Muslims and Hindus least likely to be in interreligious unions

Many immigrants citing Islam, Sikhism and Hinduism as their religion, arrived in Canada between 1991 and 2001. As such, they are more likely to have a strong cultural association with the marital traditions of their country of origin. In fact, for these three religious groups, interreligious unions are less likely in 2001 than in 1981.

About 71% of Muslim couples resided in Toronto, Montreal and Vancouver. The most common interreligious union involving a Muslim partner is with a Catholic, representing 4% of Muslims in couples. According to the Census, only 1% of Muslims in couples are in a conjugal union with someone who has no religion. Sikhs and Hindus are most likely to be in interreligious unions with Catholics or Protestants and rarely with those with no religion.

Although many Buddhists in couples have recently arrived in Canada, many also arrived earlier. Perhaps because of this longer history in Canada, and also because they are less likely to be highly religious, Buddhists are more likely to be in

interreligious unions than Sikhs, Muslims and Hindus. The most frequent Buddhist interreligious union is with a partner who has no religion.

Orthodox Christians are more likely to be in interreligious unions

Orthodox churches developed in Greece, many of the countries of south-eastern Europe, the Middle East and Russia. When immigration brought large numbers of new residents from these parts of the world to Canada, their numbers included many Orthodox Christians. Over 70% of Orthodox Christians in couples were born outside Canada, but only about 25% arrived recently. According to the Census, Orthodox Christians are one of the most likely groups to be in an interreligious union (26%). After accounting for socio-demographic variables, the EDS probability models also support this finding.

Orthodox Christians are most likely to be in interreligious unions with Catholics. This may be associated with their geographic proximity and also with the many similarities between Orthodoxy and Catholicism.⁸ Over half of Orthodox Christians in couples are located in Montreal and Toronto, where Catholics represent the largest religious group.

Interreligious unions increasing among the Jewish religious group

According to the Census, interreligious unions have become more frequent among Jewish couples, 17% being interreligious in 2001 compared with 9% in 1981. Only 8% of those with a Jewish religion arrived in Canada between 1991 and 2001, so people who have the Jewish religion have a longer history in Canada than many other religious groups. Jewish couples are concentrated in Montreal and Toronto (75%). Perhaps because of the cultural diversity of these large cities, interreligious unions between Jewish and other religious groups have

become more common, particularly with Catholics and Protestants.

Young couples more likely to be interreligious

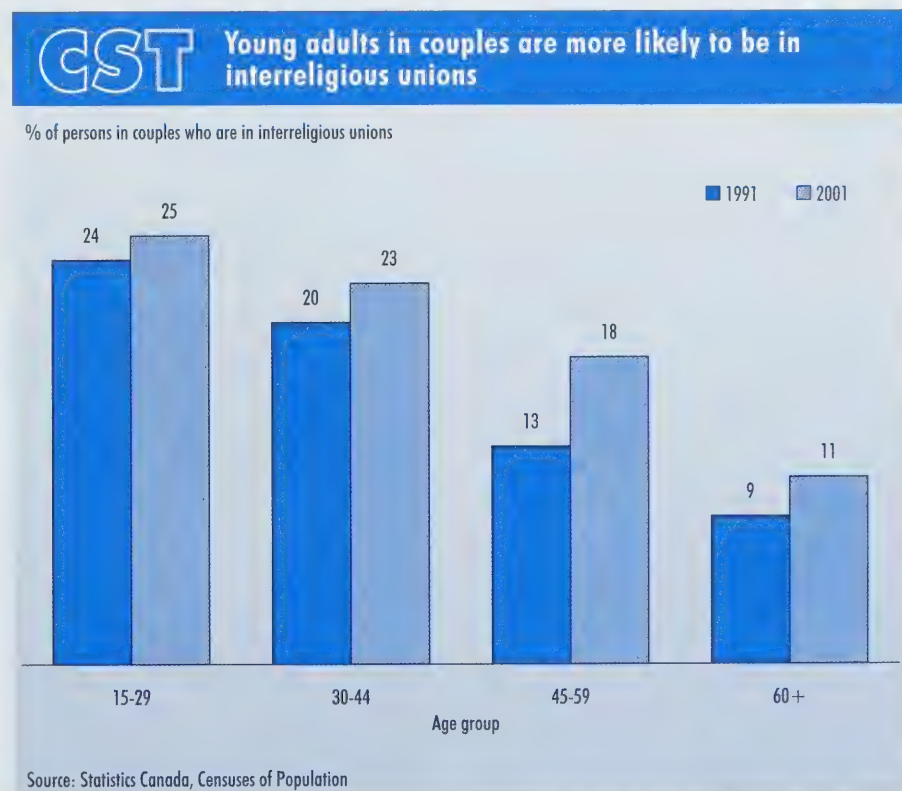
Increasingly common interreligious unions may indicate a decline in the importance of religion in social life, or that Canadians are becoming more tolerant of people outside their own religious group.⁹ Others argue that secularization has resulted in the declining influence of religion as a factor in selecting a mate while the influence of education has increased.¹⁰

Many factors are associated with the frequency of interreligious unions. (Table A.2) Older Canadians are less likely to be in interreligious unions. This may be because they entered into their marriage or common-law union when Canadian society was more homogenous than it is today, and had fewer opportunities to find partners from a different faith. American researchers also suggest that because interreligious unions are less likely to

survive than homogamous unions, older people who have been married or in a common-law union longer than younger cohorts have simply undergone attrition, leaving fewer interreligious unions among older people.¹¹

Home language makes a difference

Catholics who speak only English at home are much more likely to be in interreligious unions than their French-speaking counterparts both in and outside Quebec. Most French-speaking Canadians are Catholics, but the minority who are Protestants are more likely to be in interreligious unions than either English-speaking Protestants or Catholics who speak only French at home. Most of those who speak only a non-official language at home have only recently arrived in Canada and as such, their choice of partners is more reflective of the traditions of their home country. Only 8% of those in couples who speak a non-official language at home are in interreligious unions.



Interreligious unions more likely for highly educated people of "other" religions

Researchers have found it is more likely that more highly-educated minority groups marry outside their group than lesser-educated peers.¹² Some suggest that highly-educated people may have more individualistic attitudes and are therefore less influenced by family and community to select a mate from their ancestral religious group.¹³ Others suggest that highly-educated groups have wider intellectual horizons as well as higher levels of socioeconomic achievement, both of which may be traded off against religious compatibility.¹⁴

According to the 2001 Census, those with less than high school graduation are much less likely to be in interreligious unions, but this may be related to age (older people have less education). The EDS probability models show that after accounting for other characteristics such as age, education has a significant effect on the probability of couples being in an interreligious union primarily for "other religions"¹⁵ and Catholics outside Quebec. There is no significant effect for Protestants and the effect for Quebec Catholics and those with "no religion" is mixed. (Table A.3)

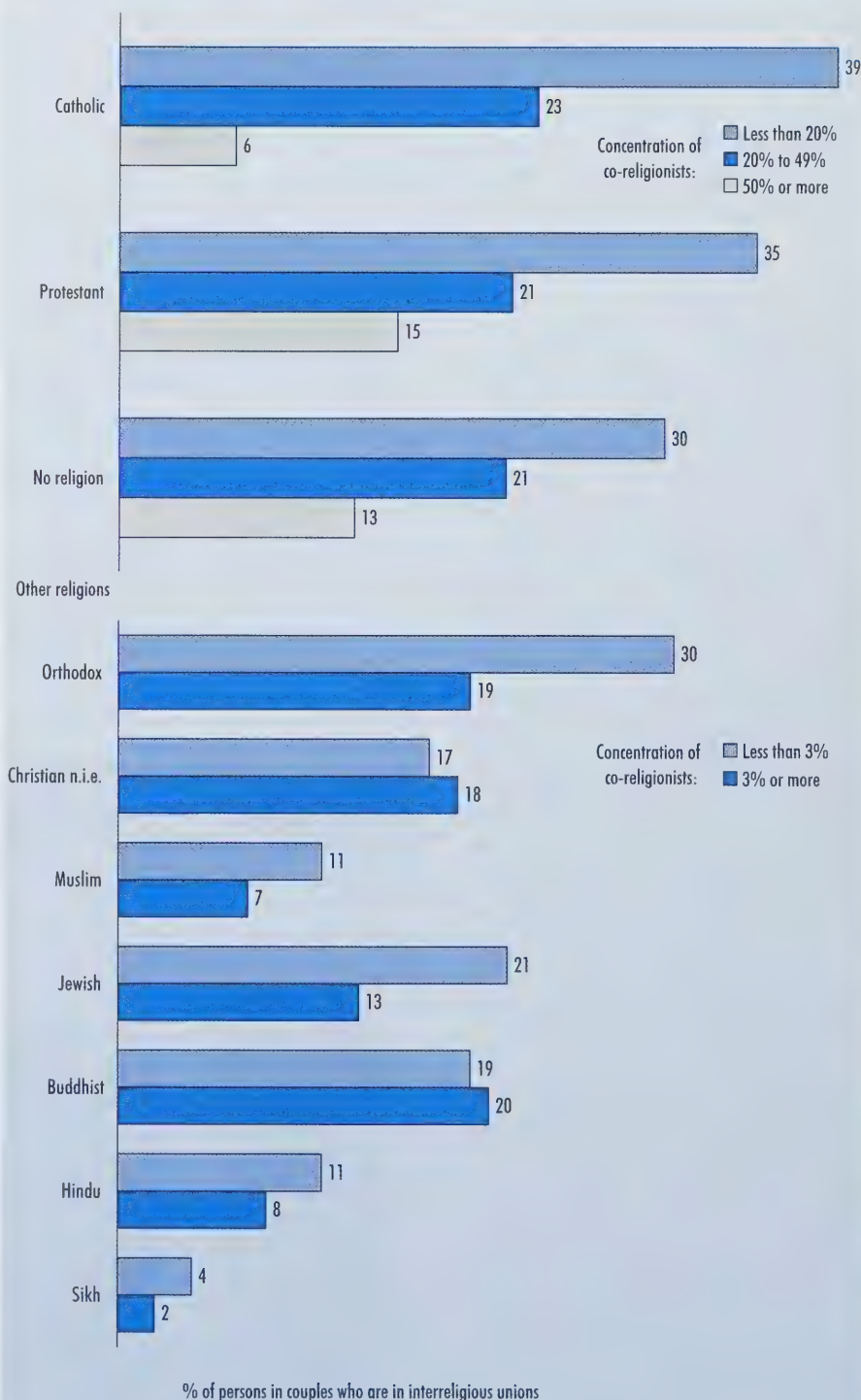
When co-religionists are scarce, interreligious unions more likely

If individuals with particular traits are scarce, they are more likely to be in interreligious unions. However, this does not always hold true. According to the 2001 Census, people in almost every religious group living in communities with a low concentration of co-religionists of the opposite sex are more likely to be in interreligious unions than people in communities with high concentrations of co-religionists. For example, among Catholic couples outside Quebec, 39% are in interreligious unions if the concentration of Catholics is low (less than 20%) in their community. However, where there is a high concentration (50% or more),

GST

Most religious groups are more likely to be in interreligious unions if there are few co-religionists in their community

Religious groups



Source: Statistics Canada, Census of Population, 2001.

20% of Catholics in couples are in interreligious unions. The only religious groups which contradict this finding are Buddhists and "Christian n.i.e. (not include elsewhere)".

Parents interreligious? Adult children more likely to be interreligious

Parents often play a key role in the development of attitudes and values of their children and are more likely to pass on their religiosity and religious affiliation if they have a common religious background.¹⁶ According

to the 2002 EDS probability models, after accounting for other socio-demographic factors, people whose parents were of different faiths were more likely to be in an interreligious union themselves. This was observed for Catholics, Protestants, and other religions, but not the "no religion" group.



What you should know about this study

Data in this article are from the 1981, 1991 and 2001 Censuses of Population and from the 2002 Ethnic Diversity Survey (EDS). Interreligious unions refer to couples who at the time of the Census were married or living common-law with a partner from a different religious group. The Census asked respondents to report a specific religious denomination or group even if they were not practicing members of the group. People with no connection or affiliation with any religious group were asked to indicate that they had "No religion". "No religion" also includes atheists, agnostics, humanists, free thinkers and others who for whatever reason indicated that they were without a religious affiliation. This article refers to the following religious groups: Catholic, Protestant, Orthodox, Christian n.i.e. (not included elsewhere), Muslim, Buddhist, Hindu, Sikh, Other Eastern religions, "other religions" and "no religion". Marriages or common-law unions between denominations within a group (e.g. between a Roman Catholic and a Polish Catholic) are not counted as interreligious in this article whereas a union between two broad groups such as between a Protestant and a Buddhist is considered to be an interreligious union.

The Census records the current religion of respondents at the time of the Census. Current religion underestimates interreligious unions because a marriage or common-law union may lead to religious conversion of one of the partners. A religious conversion of a partner at the time of union formation is not collected by the Census.

Data from the 2002 EDS was used to develop five logistic regression models (Quebec Catholics, Catholics outside Quebec, Protestants, "Other religions", "No religion") to estimate probabilities of a person in a couple being in an

interreligious union. The following variables were included in each model: gender, age, marital status, parents in an interreligious union when the respondent was aged 15, province of residence, religion of mother, religion of respondent, religiosity of respondent, highest level of schooling, home language and size of community where respondent lived in 2001. Predicted probabilities were calculated holding all variables at their mean value except the variable of interest.

The EDS surveyed the non-Aboriginal population aged 15 and over. About 42,500 people were interviewed of which 21,800 were in a conjugal union and were included in one of the logistic regression models.

Religiosity was measured using four dimensions – religious affiliation, attendance at religious services, personal religious practices, and importance of religion – in a simple additive scale. Individuals with no religious affiliation were assigned a score of 0, while those with an affiliation received a score of 1 to 13. People were grouped into three broad categories based on their religiosity index, low (0-5), moderate (6-10) and high (11-13). The group with 'low religiosity' includes persons with no religious affiliation.

This article uses the following terms:

Interreligious unions – couples where each partner is from a different religious group.

Homogamous unions – couples where partners are from the same religious group including unions between two people with no religion.

Co-religionists – people who are in the same broad religious group as the respondent

Highly religious people less likely to be in interreligious unions

Several studies confirm that those who have higher levels of religiosity place more importance on religious compatibility when selecting a mate than persons with lower levels of religiosity.¹⁷ Those with high religiosity may feel a strong affinity to their own religion and feel uncomfortable in other religious settings, especially those whose doctrine and religious practices are distant from their own tradition.¹⁸ Therefore it is not surprising that the EDS probability models show that after accounting for other social-demographic factors, those with high religiosity are least likely to be in an interreligious union.

Summary

With increasing cultural diversity in Canada, interreligious conjugal unions are on the rise, but still the vast majority of couples have partners from the same broad religious group. Of course, the likelihood of an interreligious union is associated with where you are, how homogeneous the religious mix of your community is, how religious you are, how traditional the doctrine of your religion is, and how long you've been in Canada.

People in communities which are religiously homogeneous and people who are highly religious are less likely to be in interreligious unions. Immigrants are also less likely to be in interreligious unions.


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1. Lehrer, Evelyn L. 1998. "Religious intermarriage in the United States: Determinants and trends." *Social Science Research*. 27:245-263.
2. Voas, David. 2003. "Intermarriage and the demography of secularization." *British Journal of Sociology*. 54(1): 83-108.
3. In general, this article uses broad religious groups to identify those who are in interreligious unions. If a union between people of two different denominations within one of the broad religious groups was considered an interreligious union then the number of people in interreligious unions in 2001 would have been 3.35 million or 24% of all people in unions compared to 2.68 million when broad religious groups as defined in this article are used.
4. Kalmijn, M. 1998. "Intermarriage and homogamy: causes, patterns, and trends." *Annual Review of Sociology*, 24:395-421.
5. Kalmijn. 1998.
6. Conservative Protestant includes Baptist, Pentecostal, Nazarene, Evangelical Free, Mennonite, Salvation Army, Reformed, Christian and Missionary Alliance and other smaller groups.
7. Mainline Protestant includes Anglican, Lutheran, Presbyterian and United Church.
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9. Bibby, Reginald W. 1999. "On boundaries, gates and circulating saints: A longitudinal look at loyalty and loss." *Review of Religious Research*. 41: 149-164.
10. Kalmijn. 1998.
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17. Sherkat, Darren E. 2004. "Religious intermarriage in the United States: trends, patterns, and predictors." *Social Science Research*. 33: 606-625.
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Table A.1 Religions of partners in conjugal unions

Religion of respondent		Religion of respondent	
Catholic ('000s)	6,200.2	Protestant	5.6
Religion of partner	(%)	No religion	3.9
Catholic	84.0	Orthodox	0.9
Protestant	10.9	Christian n.i.e.	0.5
No religion	3.7	Others	0.5
Orthodox	0.5	Hindu ('000s)	146.0
Others	0.8	Religion of partner	(%)
Protestant ('000s)	4,483.6	Hindu	91.2
Religion of partner	(%)	Catholic	3.0
Protestant	78.7	Protestant	1.9
Catholic	15.1	No religion	1.0
No religion	4.9	Muslim	0.9
Others	1.3	Sikh	0.9
No religion ('000s)	2,005.2	Christian n.i.e.	0.7
Religion of partner	(%)	Others	0.6
No religion	74.7	Buddhist ('000s)	142.6
Catholic	11.6	Religion of partner	(%)
Protestant	11.1	Buddhist	80.8
Christian n.i.e.	0.9	No religion	7.8
Buddhist	0.6	Catholic	5.8
Others	1.2	Protestant	3.5
Christian n.i.e. ('000s)	323.8	Christian n.i.e.	1.1
Religion of partner	(%)	Others	1.1
Christian n.i.e.	82.3	Sikh ('000s)	136.9
No religion	6.1	Religion of partner	(%)
Catholic	5.0	Sikh	96.9
Protestant	4.6	Protestant	0.6
Muslim	0.5	Catholic	0.6
Others	1.5	No religion	0.5
Orthodox Christian ('000s)	243.0	Others	0.5
Religion of partner	(%)	Other religions ('000s)	22.0
Orthodox Christian	74.3	Religion of partner	(%)
Catholic	13.4	Other religions	54.5
Protestant	7.9	No religion	18.5
No religion	2.8	Protestant	11.8
Jewish	0.6	Catholic	10.4
Muslim	0.5	Christian n.i.e.	1.6
Others	0.5	Buddhist	1.5
Muslim ('000s)	239.2	Jewish	0.6
Religion of partner	(%)	Others	1.7
Muslim	91.4	Eastern religions ('000s)	17.4
Catholic	3.8	Religion of partner	(%)
Protestant	1.4	Eastern religions	72.6
No religion	1.3	No religion	7.9
Hindu	0.6	Protestant	7.0
Orthodox	0.6	Catholic	6.0
Others	0.4	Hindu	1.5
Jewish ('000s)	159.7	Muslim	1.2
Religion of partner	(%)	Buddhist	1.0
Jewish	82.6	Other religions	0.6
Catholic	6.0	Others	1.5

Source: Statistics Canada, Census of Population, 2001.

Table A.2 Interreligious unions are increasing

	Population in couples	Total	Religious groups				
			Quebec Catholics	Catholics outside Quebec	Protestants	Other religions ¹	No religion
	('000s)		(Percent of population in couples in interreligious unions)				
2001	14,120	19	3	27	21	16	25
1991	12,840	17	2	25	17	16	27
1981	11,221	15	2	21	14	16	38
2001							
Gender							
Male	7,064	19	3	26	19	16	32
Female	7,056	19	3	29	23	16	17
Age							
15-29	1,374	25	5	37	33	20	28
30-44	5,169	23	4	32	28	17	26
45-59	4,529	18	3	26	21	16	24
60+	3,048	11	2	15	11	11	24
Marital status							
Married	11,803	18	3	25	19	14	24
Common-law union	2,317	25	3	43	42	50	28
Religion							
No religion	2,005	25	...	...	...	...	25
Catholic	6,200	16	3	27	...	...	...
Protestant	4,484	21	...	...	21	...	...
Mainline Protestant ²	3,155	23	...	...	23	...	...
Conservative Protestant ³	871	13	...	...	13	...	...
Other Protestant	458	25	...	...	25	...	...
Orthodox Christian	243	26	...	...	...	26	...
Christian n.i.e.	324	18	...	...	...	18	...
Muslim	239	9	...	...	...	9	...
Jewish	160	17	...	...	...	17	...
Buddhist	143	19	...	...	...	19	...
Hindu	146	9	...	...	...	9	...
Sikh	137	3	...	...	...	3	...
Other Eastern religions	17	27	...	...	...	27	...
Other religions	22	46	...	...	...	46	...
Highest level of schooling							
Less than high school graduation	3,807	14	2	19	16	10	21
High school diploma or some postsecondary	3,297	20	3	30	23	16	25
Trades or college certificate or diploma	4,136	22	3	31	23	21	29
University-educated	2,879	21	5	30	24	17	25

Table A.2 Interreligious unions are increasing (continued)

	Population in couples	Total	Religious groups				
			Quebec Catholics	Catholics outside Quebec	Protestants	Other religions ¹	No religion
	('000s)		(Percent of population in couples in interreligious unions)				
Home language							
English only	9,253	26	23	34	21	26	28
French only	3,080	3	2	3	28	27	23
Other only	1,557	8	5	7	12	6	11
English & French	43	22	15	18	54	33	22
English & other	162	9	8	8	16	7	16
French & other	20	9	8	7	16	7	29
English, French & other	5	11	5	14	19	14	28
Generational status							
First (Immigrants)	3,480	16	8	17	19	11	19
Second ⁴	2,093	24	8	32	20	27	29
Third ⁵	8,547	19	2	31	22	27	28
Size of community							
Rural and small town Canada	3,084	16	2	26	16	23	26
Under 25,000	378	20	1	26	21	23	27
25,000-249,999	2,605	20	1	30	21	23	27
250,000-999,999	2,980	23	2	30	23	19	27
1,000,000 and over	5,072	18	5	24	27	13	23
Concentration of co-religionists ⁶							
Low — Less than 20%	2,823	24	...	39	34	16	30
Moderate — 20% to 49%	8,221	22	2	27	21	...	21
High — 50% or more	3,075	7	3	20	15	...	13
Census metropolitan areas (CMA)							
Montréal	1,532	9	5	...	35	14	24
Ottawa-Gatineau	491	23	5	25	33	19	31
Toronto	2,142	20	...	21	25	12	24
Calgary	443	27	...	37	25	17	26
Edmonton	428	27	...	32	24	21	27
Vancouver	907	23	...	35	24	15	19

... not applicable

1. Includes Orthodox Christian, Christian n.i.e., Jewish, Muslim, Buddhist, Hindu, Sikh, Other Eastern religions and other religions.

2. Mainline Protestant includes Anglican, Lutheran, Presbyterian, United Church.

3. Conservative Protestant includes Baptist, Pentecostal, Nazarene, Evangelical Free, Mennonite, Salvation Army, Reformed, Christian and Missionary Alliance and other smaller groups.

4. Includes people born in Canada who have at least one parent born outside Canada.

5. Includes people born in Canada whose parents were both born in Canada.

6. This is the percentage of the population aged 20 to 59 of the opposite sex of the respondent in the same Census Metropolitan Area or Census Agglomeration that is in the same broad religious group as the respondent (co-religionist).

Source: Statistics Canada, Censuses of Population.

Table A.3 Predicted probability of a person in a couple being in an interreligious union

	Religious groups				
	Quebec Catholics	Catholics - rest of Canada	Protestant	Other ¹	No religion
	Predicted probability (%)				
Total	3	27	21	16	25
Gender					
Men	3	25	18*	13*	30*
Women	3	29	25	20	20
Age					
15-29	5	32	34	15	21
30-44	5	28	29	15	24
45-59	2*	27	24*	15	24
60+	3*	24*	12*	20	37*
Marital status					
Married	3	27	20	15	26
Common-law	5*	32*	32*	32*	23
Province of residence					
Atlantic provinces	...	23	16*	33*	37*
Quebec	...	...	25	17	33
Ontario	...	26	22	15	27
Prairie provinces	...	30	22	11*	29
British Columbia	...	38*	25	21*	19*
Parents were in interreligious union					
Yes	10*	39*	27*	23*	23
No	3	26	20	15	26
Religion of mother					
No religion	0	18*	31*	34	18*
Catholic	3	29	17	36	31
Protestant	4	16*	21*	22	27
Other Christian	40*	32	37*	9*	36
Other religion	9*	31	43*	18	36
Religion of respondent					
Mainline Protestant ²	...	...	22	...	...
Conservative Protestant ³	...	...	18*	...	...
Other Protestant	...	...	23	...	...
Orthodox Christian	...	...	...	44*	...
Christian n.i.e. (not included elsewhere)	...	...	...	18*	...
Muslim ⁴	...	...	...	10	...
Jewish	...	...	...	7	...
Buddhist	...	...	...	26*	...
Hindu	...	...	...	9	...
Sikh	...	...	...	6	...
Other Eastern religions	...	...	...	24*	...
Religiosity					
Low (0-5)	4*	47*	31*	31*	...
Medium (6-10)	4*	35*	27*	25*	...
High (11-13)	2	16	11	9	...
Highest level of schooling					
Less than high school diploma	2*	23	20	9*	25
High school diploma or some postsecondary	4	26	21	14	25
College diploma or certificate	4	29	21	21*	31*
University degree	3	33*	23	19*	23

Table A.3 Predicted probability of a person in a couple being in an interreligious union
 (continued)

	Religious groups				
	Quebec Catholics	Catholics - rest of Canada	Protestant	Other ¹	No religion
	Predicted probability (%)				
Home language					
<i>English only</i>	48	36	27	30	30
<i>French only</i>	2*	2*	42*	26	25
<i>Non-official language</i>	22*	18*	29	8*	9*
<i>English and French</i>	11*	31	36*	36	29
<i>English and non-official language(s)</i>	28*	16*	20	9*	18*
<i>French and non-official language(s)</i>	15*	13	25	4*	39
Size of community in 2001					
<i>Rural and small town Canada</i>	5	28	16*	17	24
<i>Under 25,000</i>	0	17	20	15	27
<i>25,000-249,999</i>	1	28	20	16	23
<i>250,000-999,999</i>	5	26	22	18	21
<i>1,000,000 and over</i>	4	28	24	15	29

... not applicable

1. Includes Orthodox Christian, Christian n.i.e., Jewish, Muslim, Buddhist, Hindu, Sikh, Other Eastern religions and other religions.

2. Mainline Protestants (Anglican, Lutheran, Presbyterian, United Church) are the reference group for Protestants.

3. Conservative Protestant includes Baptist, Pentecostal, Nazarene, Evangelical Free, Mennonite, Salvation Army, Reformed, Christian and Missionary Alliance and other smaller groups.

4. Muslim is the reference group for "Other religions".

* Statistically significant difference from reference category ($p < 0.05$).

Note: Reference groups are shown in italics.

Source: Statistics Canada, Ethnic Diversity Survey, 2002.

Junior comes back home: Trends and predictors of returning to the parental home

by Pascale Beaupré, Pierre Turcotte and Anne Milan

Boomerang *noun* (1) a curved flat hardwood projectile used by Australian Aborigines to kill prey, and often of a kind able to return in flight to the thrower. (2) a plan etc. that backfires. *intransitive verb* (1) act as a boomerang. (2) (of a plan etc.) backfire.¹

Canadians with adult children may be familiar with both meanings of the word “boomerang.” It describes the behaviour of young adults who, after living away from home for a time, return to live with their parents. Although many parents may be unprepared for this “blast from the past”, an adult child returning home has become a fairly common, predictable event in family life.²

Leaving home is often a continuing process in which close ties with the family home are unravelled slowly rather than being cut quickly. Even though the child is living elsewhere, some level of dependence remains, whether it is emotional, financial or functional, or all three.³ In this stage of what researchers have called “semi-autonomous living,” the family home may provide a form of safety net for young adults and a refuge from financial or emotional difficulties.⁴ Consequently, leaving may occur multiple times rather than just once.

Returning home is not usually characterized by tension and discord between the generations.⁵ In fact, parents may appreciate having their adult child’s companionship and help at home, although studies do find that parents’ satisfaction is greater when their adult children are more independent, more mature, and give as well as receive support.⁶

However, a return home does interrupt each party’s plans for the future, and neither parents nor children may know what is expected of them in their new roles. Returning home tends to increase parental responsibility, as mothers are left with additional care giving tasks such as cooking or doing laundry.⁷ Sharing the house again can also produce difficulties caused by interpersonal conflicts or lack of social or practical support.⁸

This paper uses data from the 2001 General Social Survey to examine patterns in the frequency with which young people have returned home over the last few decades, their reasons for returning, and the socio-demographic and economic factors that influence this process.

Returning has become more common with each generation

Returning home in young adulthood has evolved from a relatively rare

to a fairly common event. While a proportion of youngsters have always returned home after first striking out on their own, what we see from a life table analysis is that the tendency to return home at least once has risen in each generation, starting with the boomers. For example, among early Wave 1 Boomers (born 1947-51), the probability of returning home within five years of first leaving was less than 12% for men and 10% for women. In contrast, the probability for the later wave of Gen Xers (born 1972-76) was 32% for men and 28% for women. In other words, for both men and women, the likelihood of coming back home has nearly tripled. (Table A.1)

There are a number of factors that help explain this growing trend. These include the increasing acceptance of common-law relationships (since such unions are more likely to break up than marriages); the pursuit of higher education, which tends to leave young graduates with heavy student debts; financial difficulties; the reduced stigma attached to living with parents; wanting a standard of living impossible to afford on their own; the new and different roles of parents and children in families; and needing a parent’s emotional support during the stressful transition to adulthood and independence.⁹

Factors that increase the risk of return are birth cohort...

Hazard model analysis allows us to estimate the probability that a young adult with certain characteristics will return home to their parents; when this probability is compared to that of a reference group, it produces a risk ratio that identifies whether the characteristic will increase or decrease the likelihood of a young adult moving back into the family home.

This method shows quite clearly that the boomerang phenomenon

began with the female Wave 1 Boomers and accelerated among both sexes in the succeeding cohorts. Compared with women born during the Depression and Second World War (1932-46), and when all other variables in the model are controlled for, Wave 1 Boomer women had a 39% greater likelihood of returning home. By the time Generation X women (born 1967-76) had reached the fledgling stage, their chance of returning home was almost two-and-a-half times higher. Meanwhile, Gen X men's risk of coming back to their

parents' home was over twice as high as that of men from the 1932-46 birth cohort.

...reason for going

The boomerang phenomenon partly reflects the changing reasons for leaving the parental home over recent generations. According to the 2001 GSS, getting married and having a job were the two main reasons why the War/Depression birth cohort left home for the first time; by the time Generation X was ready to go, being independent and going to school were

CST

Demographic and socio-economic factors associated with home returning

	Men	Women		Men	Women
	Risk ratios			Risk ratios	
Birth cohort			Birth place of mother		
<i>War/Depression</i>	1.00	1.00	<i>Mother born in Canada</i>	1.00	1.00
Wave 1 Boomers	1.20	1.39*	Born outside Canada	0.97	0.83*
Wave 2 Boomers	1.64*	1.82*	Religious attendance at age 15		
Generation X	2.07*	2.43*	<i>Weekly</i>	1.00	1.00
Generation Y	2.81*	3.28*	Sometimes	1.19*	1.20*
Age when first left home			Never	1.10	1.10
15 to 17 years old	1.74*	2.08*	Region of residence at age 15		
18 to 20 years old	1.42*	1.78*	<i>Quebec</i>	1.00	1.00
21 years or older	1.00	1.00	Atlantic	1.41*	1.54*
Main reason for leaving			Ontario	1.49*	1.65*
<i>Because of a job</i>	1.00	1.00	Prairies	1.31*	1.58*
To be independent	1.03	1.14	British Columbia	1.48*	1.42*
To attend school	1.32*	1.38*	Outside of Canada	0.62*	0.84
To marry or live common-law	0.24*	0.29*	Size of city where respondent lived at age 15		
Other	1.04	1.32	Less than 5,000	0.74*	0.79
Family structure while growing up			5,000 to 24,999	0.79*	0.92
<i>Two-parent intact family</i>	1.00	1.00	25,000 to 99,999	0.84	1.23
Step-parent	0.89	0.74*	100,000 to 999,999	0.96	1.40*
Lone-parent	0.57*	0.77*	<i>Lived in city of 1,000,000 or more</i>	1.00	1.00
Other	0.43*	0.35*	Level of schooling of respondent¹		
Employment status of mother when respondent was age 15			Less than secondary	1.13	1.13
<i>Mother worked</i>	1.00	1.00	<i>Had secondary diploma</i>	1.00	1.00
Did not work	0.85*	0.80*	Partial or completed postsecondary studies	0.80*	1.09
Employment status of father when respondent was age 15			Employment status of respondent¹		
<i>Father worked</i>	1.00	1.00	<i>Did not work</i>	1.00	1.00
Did not work	1.07	0.61	Did work	0.71*	0.94

1. These variables can change over time as the respondent ages; for example, an individual is more likely to have postsecondary education or employment at age 22 than at age 15.

* Statistically significant difference from reference group (shown in italics) at $p < 0.05$.

Note: Risk ratios over 1.0 indicate a higher risk associated with that characteristic, compared to the reference group (shown in italics); a risk ratio less than 1.0 indicates a lower risk, when all other variables in the model are controlled for.

Source: Statistics Canada, General Social Survey, 2001.

the top-ranked reasons. And generally speaking, people who move out to attend school, live independently or because of work have a greater likelihood of returning home than those who leave to marry.¹⁰

A brief review of why adult children come back to their family home offers some insight into why their reason for going is a useful predictor of the likelihood that they will return. There are five main reasons why boomerang kids come home (respondents were permitted to give multiple answers). The most common is education-related: either it was the end of the school year (19%) or they had finished their program or quit school (8%). Another 25% returned the first time for financial reasons, while 12% said their job had ended. Just over one in ten (11%) came home with a broken heart, seeking their parents' sympathy at the end of a relationship.

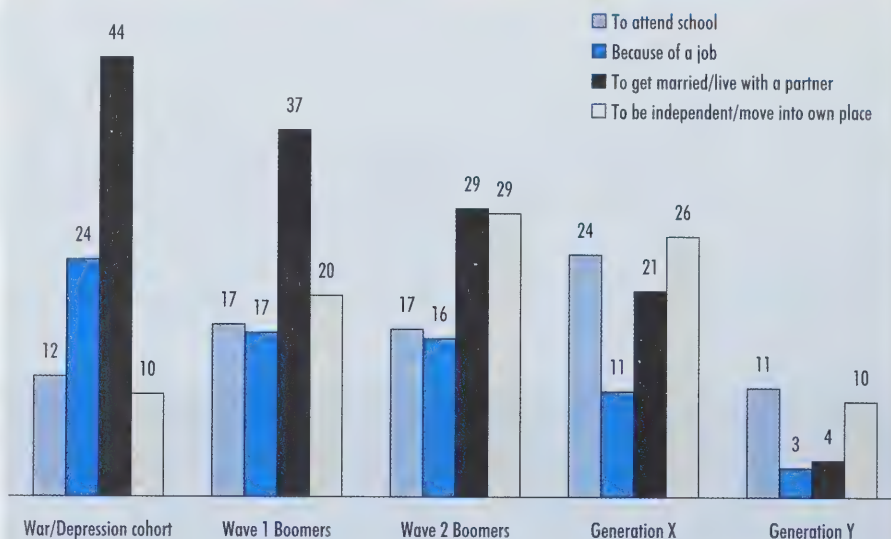
Refining this idea further, the boomerang kids who most often returned for education-related reasons were those who had left to attend college or university; the large majority of those who returned because they got into financial difficulty were those who had moved out to be independent or to attend school; and those who came back because their job had ended had most often left in order to take the job.

The hazard models confirm this link between the reason for the initial departure and a return home. Men and women who left to pursue their studies had a 32% and a 38% higher chance, respectively, of coming back home in comparison with those who moved out because of a job. On the other hand, men who left home to form a union were about 76% less likely to return, while women had a 71% lower risk, when all other variables in the model are controlled for. This confirms earlier research that has also found that departures for education- or employment-related reasons have higher probabilities of boomeranging than adult children who leave to form a relationship.¹¹ Leaving home to be independent is

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Over the generations, the most common reasons for leaving home have changed*

% of total cohort leaving home the first time



* Respondents were able to give multiple answers.

Source: Statistics Canada, General Social Survey, 2001

CST

The main reasons for the initial departure from home were closely related to reasons for returning

% of boomerang children



Legend: First left to attend school (light blue), First left because of a job (dark blue), First left to marry/live common-law (black), First left to be independent (light grey)

Note: Totals do not sum to 100 because some samples were too small to provide a reliable estimate; also because respondents were permitted to give multiple answers.

Source: Statistics Canada, General Social Survey, 2001.

not statistically significantly different than leaving because of a job, when all other variables in the model are taken into account.

...leaving before age 18

Young adults who first leave home as teenagers have a higher probability of returning to their parents' home. For those who left home between 15 and 17 years of age, men had a 74% greater likelihood and women over two times higher risk of return compared to those who waited until they were at least 21. The risk was lower among 18- to 20-year-olds leaving home for the first time. This result matches previous research

which has found that boomerang kids tend to leave the parental nest at younger ages; moreover, the younger they are at their first departure, the more likely they are to boomerang multiple times.¹²

...occasionally attending religious services

Young adults who had sometimes gone to religious services at age 15 had a higher probability of coming back home. Compared to those who had gone to church, temple or mosque each week, the likelihood of returning was 19% greater for men and 20% greater for women who had attended services occasionally when they were teens.

Young adults who had never gone to religious services in their adolescence were neither more nor less likely to return to the nest than those who had gone every week.

...and growing up outside Quebec

Young adults who grew up in Quebec tend to be older than those in other provinces when they leave home,¹³ but once they go, they are the least likely to return. Youngsters from Ontario and the West show the highest propensity to come back home. Men who spent their adolescence in Ontario (49%) or B.C. (48%) had the greatest likelihood of returning home compared to men

GST What you should know about this study

This study is based on data from the 2001 General Social Survey (GSS) on family history. The GSS interviewed 24,310 individuals aged 15 and over, living in private households in one of the 10 provinces. One extensive section of the survey collected data on the number of times respondents left the parental home and their age at the time of each of these events. Information about first and last departures from the parental home allows the transition to adult independence to be studied for several generations of Canadians. This study is based on individuals aged 15 to 69 in 2001.¹

Five birth cohorts are examined, with the text mainly focusing on Wave 1 Boomers and Generation X:

Generation Y – born between 1977 and 1986, and 15 to 24 years old at the time of the survey;

Generation X – born 1967 to 1976, aged 25 to 34;

Wave 2 Boomers – born 1957 to 1966, aged 35 to 44;

Wave 1 Boomers – born 1947 to 1956, aged 45 to 54; and

War/Depression cohort – born between 1932 and 1946, and 55 to 69 years old at the time of the GSS.

The pattern of returning home after a person's first departure is analysed in two steps. First, life-tables are used to calculate the cumulative probabilities that highlight the differences in the intensity and timing of returning to the parental home by cohorts. Second, event history analysis is used to identify the demographic and socio-economic factors associated with returning home. These factors are presented as risk ratios.

Return: An adult child's return to live in the parental home after their first departure.

Boomerang: An adult child's return to the parental home after a period of living independently. Thus, *boomerang kid*.

Risk ratios: The estimated probability that compared with a reference individual, an individual with a certain characteristic will return to the parental home for the first time. This is expressed in the article as "a higher/lower probability compared with a reference person of the same age" or "a higher/lower likelihood of returning home than someone in the reference group."

The risk ratios were calculated with a proportional hazard model using the following explanatory variables: respondent's birth cohort; family environment when the respondent was age 15 (family composition, mother's and father's employment status, mother's birthplace, religious attendance); the geographic characteristics of the respondent's place of residence when he or she was 15 (region/province/foreign country, size of town/city); and the level of educational attainment the respondent had obtained by the time he or she left the parental home, and employment status. Separate models were run for men and women.

1. Based on respondents' interpretation and recollection of the age at which they left home and returned home.

raised in Quebec. Meanwhile, women who grew up in Ontario (65%) and the Prairies (58%) had much higher risks of return than young Québécoises, when all other variables in the model are controlled for.

It is not clear why there is such a difference in the home returning patterns of Quebecers and other young Canadian adults. Previous research suggests that Anglophones may be socialized to accept leaving home as a process that may also include returning home. In contrast, this same research also suggests that the social norms for Francophones seem to expect more autonomy and independence once the first launch from home is achieved. Perhaps young adults in Quebec delay leaving the family home until they are confident that a return will not be necessary.¹⁴

Factors that discourage a return to the nest are growing up in a small town or a foreign country...

Not surprisingly, having been raised in a small town of less than 5,000 people reduces the likelihood that a young adult will return home by 26% for men, compared to being brought up in a city of over one million people. Most probably, these youngsters felt that more education and employment opportunities awaited them in a large city.

Growing up in another country also reduced the likelihood that men would return to the parental home; their risk of coming back was 38% lower compared to young men raised in Quebec. For women, spending at least part of their own childhood abroad did not have an impact when other factors are taken into account. However, if their mother was born outside Canada, a woman's risk of moving back in with her parents was 17% lower than that for women with Canadian-born mothers. For men, their mother's country of birth did not play a role in the probability that they would return home after their initial departure.

...being raised in a non-traditional family

A non-traditional family structure deters returning home, perhaps because of the resources lacking in many lone-parent families or the tensions arising within a reconstituted family. Both situations affected the likelihood that young women would return home; if they had lived in either a lone-parent or a stepfamily, their chances of coming back were 23% and 26% lower, respectively, than if they had grown up with both biological parents. Men raised by a lone parent had a 43% lower risk of returning home compared to those who grew up in a two-parent intact household, but growing up in a stepfamily did not have a significant impact.

...having a higher level of education and a job

More educated men have reduced chances of returning to the parental home, when all other factors are controlled for. Compared to men who had left home with a high school diploma, men who had a partial or complete postsecondary education were 20% less likely to come back. As would be expected, men who were employed when they first moved out of the family nest were also less likely to return home (29% lower risk) than those who had not had a job at the time of their first departure. Young men with these resources – that is, education and a job – are better able to support themselves and therefore less reliant on the safety net of the family home.

In contrast, neither employment status nor education at the time she left home had a significant effect on the probability that a woman would return to her parents.

Whether or not their father had been employed during a young adult's childhood did not have a significant impact on their risk of returning home. However, both men and women had a reduced likelihood of coming home if their mother had not

been in the workforce (15% and 20% lower, respectively), perhaps because they knew that fewer resources were available to help them. Indeed, previous research has noted the higher rates of return to more affluent families and suggested that coming back home may be an informal social safety net accessible to those who are already advantaged.¹⁵

Summary

This study has identified five socio-demographic factors that significantly affect the likelihood that a young adult will be a boomerang kid. These are: the generation into which he or she was born; the reason for leaving home; leaving home for the first time when still a teenager; occasionally attending religious services during adolescence; and growing up in a province other than Quebec.

Among the factors that reduce the risk of an adult child boomeranging are: being raised in a lone-parent or step-parent family; having a mother who did not work outside the home during the child's adolescence; and, for men, having a postsecondary education, a job and growing up in a very small town.



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Table A.1 Cumulative probabilities of first return to the parental home for male and female birth cohorts 1932-1976, Canada

Years elapsed since initial departure	Generation, age in 2001 at time of the survey, year of birth								
	Generation X		Wave 2 Baby Boomers		Wave 1 Baby Boomers		War/ Depression cohort		
	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69
	1972 to 1976	1967 to 1971	1962 to 1966	1957 to 1961	1952 to 1956	1947 to 1951	1942 to 1946	1937 to 1941	1932 to 1936
Men	Probabilities								
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	7.3	5.3	3.8	4.0	4.9	3.7	2.0	2.1	2.5
2	16.3	12.6	9.3	11.5	11.4	8.0	5.5	4.1	5.8
3	21.9	17.5	13.3	15.5	13.4	10.0	6.8	5.9	7.0
4	27.7	20.3	14.8	17.4	15.4	11.2	8.6	6.8	7.2
5	32.1	22.7	16.6	18.6	16.3	11.8	9.7	7.5	8.7
6	33.5	23.8	18.6	19.7	17.0	12.3	10.4	8.2	9.1
7	34.1	24.4	19.2	20.1	17.3	12.6	10.5	8.3	9.4
8	35.0	25.8	19.8	20.4	17.6	13.0	10.7	8.6	9.4
9	35.9	26.0	20.2	20.5	17.7	13.5	10.9	8.6	9.5
10	37.1	26.4	20.5	20.5	17.7	13.6	10.9	8.6	9.5
Women	Probabilities								
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	7.9	6.2	4.7	4.8	3.2	2.2	1.5	1.0	1.4
2	16.5	12.7	11.3	9.2	6.8	5.4	3.7	3.7	3.2
3	20.6	17.2	15.7	12.2	11.0	7.6	5.6	5.2	4.5
4	24.4	19.9	17.9	13.5	12.6	8.9	7.0	6.2	4.7
5	27.6	21.5	19.5	14.7	13.1	10.1	7.8	6.5	4.7
6	29.1	23.3	20.2	15.7	13.3	10.6	8.3	6.8	4.9
7	30.6	23.8	21.1	16.2	13.6	10.8	8.6	7.0	5.0
8	32.4	24.6	21.4	16.4	13.9	11.1	8.9	7.4	5.0
9	34.0	25.2	21.6	17.2	14.3	11.4	8.9	7.4	5.1
10		25.7	22.1	17.5	14.6	11.5	8.9	7.6	5.1

Source: Statistics Canada, life tables created with the 2001 General Social Survey.

Like commuting? Workers' perceptions of their daily commute

by Martin Turcotte

For many people who work in a large urban area and have to cope with traffic congestion on a daily basis, commuting between home and work is far from a pleasant experience. It is no more appealing for those who have to stand crammed onto crowded buses for long journeys. In fact, it is generally assumed that for most workers, commuting is at best a necessary evil, at worst, a daily nightmare. But is that really the case?

The question bears asking since these assumptions are often based on anecdotes, sensational stories of "extreme commuters" or just our general impressions. This is understandable given that very few data were collected in the past to measure how much workers like (or dislike) commuting to work. The present study is intended to fill that information gap.

Specifically, it attempts to determine, using the latest data from the 2005 General Social Survey on time use, whether commuting is in fact an unpleasant experience for most workers. The main factors associated with a more or less pleasant commute are identified, focusing in particular on the mode of transportation used.

This article presents only information for "commuting workers", that is, people who made a round trip between their home and their place of work the day before the General

Social Survey telephone interview. For convenience, they will simply be referred to as "workers".

A thousand good reasons to dislike commuting

According to the latest time use data, Canadian workers are spending more time travelling to and from work: 63 minutes in 2005 (or almost 12 full days for someone who works full time), compared with 54 minutes in 1992.¹ Increases in commuting times were observed for both drivers and public transportation users in almost every part of Canada. In the larger cities, particularly those experiencing rapid population growth such as Calgary, the increases were even larger. The overall conclusion from this study is that more and more workers are spending more and more time travelling to and from work.

It might be expected that dissatisfaction levels would be quite high and that most workers would regard commuting to work as a very unpleasant activity. And yet ...

Better to commute than to clean

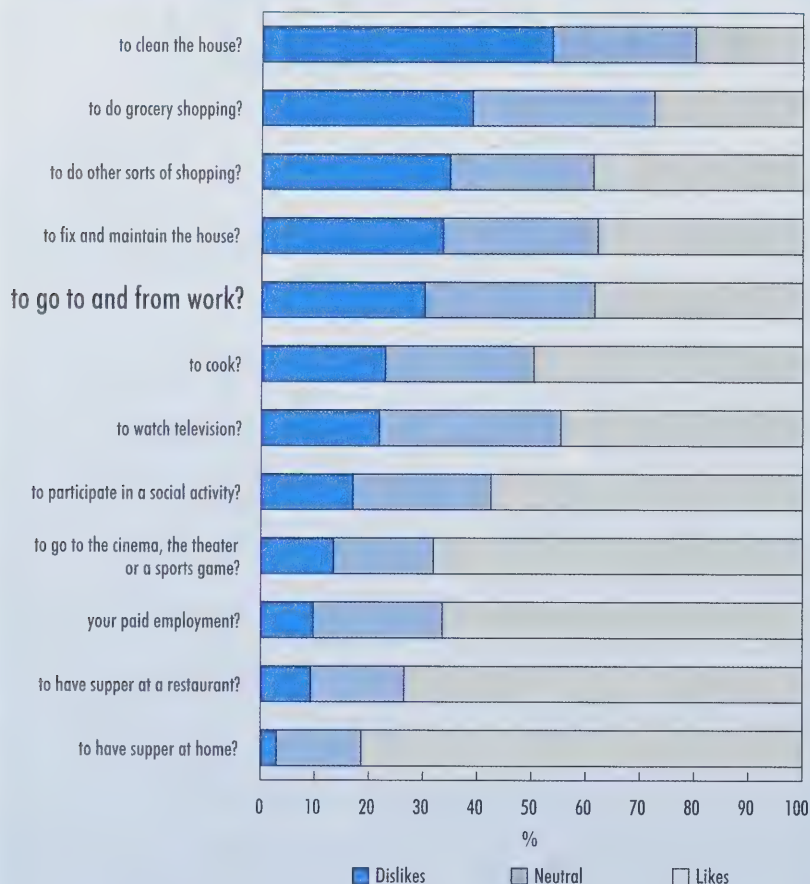
Respondents to the 2005 General Social Survey (GSS) were asked to rate a set of activities (including "commuting to and from work") using a scale from "1" to "5" where "1" meant they disliked the activity a great deal and "5" meant they enjoyed it a great deal.

In total, 12% of all workers who had travelled between home and work the previous day rated commuting as a "1", indicating that they disliked it a great deal, while another 18% gave it a "2", indicating that they disliked the activity but not a great deal. Despite all this, the percentage of workers who were negative about commuting to and from work (30%) was lower than the proportion of workers who said they liked it (38%). One out of six workers (16%) even said that they liked commuting *a great deal*.

These findings raise the question of whether commuting workers are people who are "positive" by nature and enjoy a wide variety of activities, including commuting to work. The 2005 Time Use Survey also collected information about respondents' views on a number of daily activities. That information indicates that for the majority of workers, commuting is not the most unpleasant activity in their lives. The proportion of workers who did not like cleaning the house, grocery shopping or other kinds of shopping was higher than the proportion of workers who did not like commuting to and from work.

A recent study in the United States also found that the proportion of workers who liked commuting was relatively high, or at least higher than the researchers had expected.² In that survey, 40% of workers reported that commuting between home and work was a transition that they

How do you like...



Source: Statistics Canada, General Social Survey, 2005.

found "useful". According to the authors, this somewhat unexpected result is attributable in part to the fact that for many workers, the time they spend commuting is one of the only times in the day they have to themselves. During their commute, workers have the opportunity to think about personal matters, listen to their favourite music, read a book if they take public transportation, talk on the phone, and so on.

Nevertheless, it is probably best not to exaggerate the significance of these findings; a larger proportion of workers like any number of activities (such as paid work and cooking) more than commuting.

Workers who use public transit like commuting less than those who drive their cars

While the data show that workers on the whole have a relatively positive attitude toward commuting, they conceal some important differences based on the mode of transportation, age group, place of residence, and so on. The various characteristics associated with a more positive or less positive opinion of commuting are presented in Table A.1.

This table shows that users of public transport are less likely to enjoy commuting than drivers. In 2005, only 23% of people who travelled between home and work

on mass transit said they liked commuting, compared with 39% of drivers.

However, younger workers, those who live in large cities and those who spend more time travelling to and from work are less likely to enjoy commuting, all of which are characteristics typical of public transit riders. Public transport users are generally younger and much more likely to live in larger cities, spending a significantly longer time on commuting.³

This complex situation, in which a number of factors appear to interact with one another, raises the question of whether mass transit users are less likely to enjoy commuting because they also have other characteristics associated with a negative opinion; or because taking public transport is, regardless of these other factors, associated with a lower probability of liking the daily commute. To answer this question, a statistical analysis that takes all these characteristics into account simultaneously is needed. (See "What you should know about this study".)

The results for Model 1 show that the predicted probability that public transit users will like commuting is lower than the probability for drivers, even when the other factors are kept constant. Specifically, the predicted probability that a public transport user will like commuting is 28%, compared with 38% for a car driver.

However, Model 1 does not include the *duration* of the commute. A recent American study⁴ indicates that trip duration is the factor that most influences the stress of commuters using a suburban train (the longer the commute, the greater the stress). What happens if time is kept constant, that is, if drivers and public transit riders with the same commute times are compared?

As was found in the American study of travel time and stress, adding the time factor in Model 2 (commute duration) eliminates the difference between drivers and public transportation users in their

	Model 1		Model 2			Model 1		Model 2	
	Dislikes or greatly dislikes	Likes or greatly likes	Dislikes or greatly dislikes	Likes or greatly likes		Dislikes or greatly dislikes	Likes or greatly likes	Dislikes or greatly dislikes	Likes or greatly likes
Predicted probability (%)					Predicted probability (%)				
Mode of transportation used to get to work¹					Season in which the GSS survey took place				
Automobile (no public transportation)	25	38	25	37	Spring	26	37	n. s.	n. s.
Public transportation (no automobile)	34	28	n. s.	n. s.	Summer	23	40	23	39
Bimodal (public transport and automobile)	40	23	33	28	Fall	n. s.	n. s.	n. s.	n. s.
Walking	18	47	19	46	Winter	29	33	28	33
Cycling	13	57	12	59	Area of residence				
Other	n. s.	n. s.	n. s.	n. s.	Toronto	27	35	26	36
Commuting duration					Montréal	31	31	30	32
1-29 minutes	...	...	19	46	Vancouver	32	30	31	30
30-59 minutes	...	...	22	41	Ottawa-Gatineau	31	31	31	31
60-89 minutes	...	...	26	36	Calgary	34	28	34	28
90-119 minutes	...	...	31	30	Edmonton	30	32	29	32
120 minutes and over	...	...	39	23	CMA of 250,000 to 750,000 residents	27	36	26	35
Distance from workplace					CMA/CA of 100,000 to 249,999 residents	21	42	22	41
1-4 kilometers	14	55	16	51	CA of 50,000 to 99,999 residents	n. s.	n. s.	n. s.	n. s.
5-9 kilometers	19	45	21	42	Urban region of 49,999 residents or less	n. s.	n. s.	n. s.	n. s.
10-14 kilometers	24	38	25	37	Strong MIZ	n. s.	n. s.	n. s.	n. s.
15-19 kilometers	30	31	31	31	Rural area (moderate, weak or no influence MIZ)	18	48	19	46
20-24 kilometers	32	30	31	31					
25-29 kilometers	32	30	29	32					
30-34 kilometers	40	23	36	26					
35-39 kilometers	41	23	35	27					
40 kilometers or over	49	17	40	23					

... not applicable

1. The mode of transportation used to make the greatest part of the journey (based on time).

All predicted probabilities presented in this table were calculated from coefficients statistically significant at $p < 0,05$.

Municipalities (small towns, villages, etc.) not located within a CMA or a CA are classified based on the percentage of the population making the commute to a CMA or CA to go to work.

A municipality is categorized as a strong MIZ if 30% or more of its population commutes to a CMA/CA; moderate MIZ if the percentage is between 5% and 29%; weak MIZ if the percentage is between 0% and 5%; and no influence MIZ if no-one commutes to a CMA/CA.

CA : census agglomeration.

CMA : census metropolitan area.

MIZ : census metropolitan area and census agglomeration influenced zone.

n. s. : not statistically different from the reference category in italics.

Source: Statistics Canada, General Social Survey, 2005.

attitudes toward commuting. When commute duration and all the other factors included in the analysis are kept constant, there is no statistically significant difference in liking and disliking the daily commute between users of public transport and drivers.

Hence, the results of the present study suggest that if the average travel time of public transport users was equal to that of car drivers (which it is not), their attitudes toward commuting could be similar (in contrast to the results shown in Table A.1 when the various factors

that differentiate drivers from public transit users are not taken into account).

For workers who used both the automobile and public transportation to commute, the inclusion of travel time did not, however, eliminate the significant statistical correlation

observed. It would seem that, of all commuters, they are the ones for whom commuting is most unpleasant. The fact that the majority of them have to transfer, and therefore endure additional waits or the frustration of having missed a connection, may account for this persistent difference.

Cyclists are more likely to enjoy commuting

Very few workers travel to work by bicycle. According to 2001 Census data, about 1% of commuters rode a bicycle to work (the largest proportion was 4.9% in Victoria, British Columbia). Cyclists differ from other workers not only because of their small numbers, but also because they are much more likely to enjoy commuting to work. The predicted probability that a worker commuting to work by bicycle would like the activity was 59%, compared with only 37% for people who used their cars to get to work (Model 2). Workers who walked to work were also more likely to enjoy commuting, with a predicted probability of 46%.

Farther, longer ... and less enjoyable

Not surprisingly, duration is one of the factors that has the greatest impact on the probability of liking or disliking the commute to work. For commuters who spent two hours or more a day travelling between home and work, the predicted probability that they would like doing so was just 23%. In contrast, it was 46% for those whose commute time was less than 30 minutes.

Commute duration does not explain everything, though. Even when the effect of travel time is kept constant, the farther a worker lives from his place of work, the lower the probability that he will like commuting. Although some people are obliged to travel long distances to get to work, many others have chosen to live a considerable distance from work in order to have, for example, more space at a better price.⁵ Although the location of their home stems from a deliberate choice, it does not alter the fact that those who take longer and travel greater distances to get to work are those who like commuting the least.

The inconveniences of urban life: living in a large city is associated with liking commuting less

In general, the residents of larger cities have to allow more time for commuting than do people who live in smaller centres. However, even when commute time is kept constant (along with the other factors included in the analysis), workers who live in larger cities remain less likely to enjoy commuting than workers who reside in smaller centres. For example, the predicted probability that residents of the census metropolitan area (CMA) of Calgary would not like commuting was 34%, compared with just 19% for workers living outside the urban area.

Some studies have shown that travel time has an even more negative effect for individuals when they have to commute on heavily congested roads.⁶ In other words, 30 minutes of driving on a relatively uncongested road would cause significantly less dissatisfaction than 30 minutes in bumper-to-bumper traffic. The effects are even more negative when gridlock is unexpected.

In general, the larger a city is, the heavier the traffic.⁷ As a result, workers in larger cities have a greater chance than others of commuting under more stressful conditions. This makes it easier to understand why workers who live in larger urban areas are less likely than other workers, given equal commuting distance and duration, to enjoy commuting.

Liking the job and being eager to get there

One correlation that catches attention exists between liking one's job and the probability of liking commuting. According to the statistical model, the predicted probability that a worker who likes his paid work a great deal would also like travelling to work was 64%, compared with only 10% for a worker who disliked her paid work a great deal. To our knowledge, this correlation, which is one of the strongest presented in this study,

GST What you should know about this study

The people selected for inclusion in this study were all those who travelled between home and work the day before the telephone interview for the 2005 General Social Survey (or two days before in some cases). For more details on the survey methodology, please see *The Time it Takes to Get to Work and Back*, Statistics Canada Catalogue no. 89-622-XWE.

Analytic techniques and statistical models

The figures shown in the tables are predicted probabilities based on an ordered logit model. They represent the estimated probability that a "commuting worker" with a particular characteristic (e.g., driving his/her car to work) will like or dislike commuting, after all the other factors in the regression model have been taken into account, i.e., kept constant. The predicted probabilities were calculated by keeping all variables, except the variable of interest (e.g., driving), constant at their average value for the sample in question. To take into account the General Social Survey's complex sampling methods, bootstrap weights were used to estimate the standard errors of the regression models' beta coefficients.

has not been seen in any previous studies. This finding indicates that when a worker likes her job, she will more likely be anxious to get to work and may also be more likely to put up with some of the unpleasant aspects of commuting, such as road congestion.

Among the other characteristics associated with attitude to commuting are age and level of education (but not gender). On average, younger workers tend to like commuting less. This correlation between age and attitude to commuting may be due to generational differences between baby-boomers and their children. Another possibility is that younger workers tend to like commuting less because it takes up too much of the time they might otherwise spend with their family and friends.⁸

GST People who love commuting

In the Time Use Survey, respondents were asked to identify, among all the activities in which they participated during the day, the one they liked best. As surprising as it may seem, some people (about 3% of all workers) said that the time they spent commuting between home and work was their favourite activity of the day. Who are these "eccentric" people?

Further analysis revealed that one of the only characteristics separating those who loved commuting from other workers (apart from travel time) was bicycling to work. That is, 19% of workers who rode their bicycles to work reported that their commute was the most pleasant activity of their day; in contrast, this was true of just 2% of workers who drove to work.

GST Commuters who like their jobs are more likely to enjoy commuting

	Model 1 ¹		Model 2	
	Dislikes or greatly dislikes	Likes or greatly likes	Dislikes or greatly dislikes	Likes or greatly likes
Predicted probability (%)				
Assessment of paid job				
<i>Greatly dislikes</i>	64	10	64	10
Dislikes	48	18	48	17
Neutral	39	24	38	24
Likes	25	37	25	37
Greatly likes	10	64	10	64
Sex				
<i>Woman</i>	25	37	25	37
Man	n. s.	n. s.	n. s.	n. s.
Age group				
<i>15 to 24 years</i>	34	28	34	28
25 to 34 years	26	36	26	36
35 to 44 years	26	37	25	37
45 to 54 years	22	42	21	42
55 years and over	21	43	21	43

	Model 1		Model 2	
	Dislikes or greatly dislikes	Likes or greatly likes	Dislikes or greatly dislikes	Likes or greatly likes
Predicted probability (%)				
Language				
<i>English</i>	26	37	26	36
French	n. s.	n. s.	n. s.	n. s.
Highest level of schooling attained				
<i>Less than secondary</i>	22	42	22	41
Secondary diploma	n. s.	n. s.	n. s.	n. s.
College or trade/technical diploma	26	36	26	36
University degree	28	34	27	35
Immigrant status				
<i>Born in Canada</i>	26	36	26	36
Arrived before 1980	27	36	26	36
Arrived between 1980 and 2005	21	43	20	43
Main activity in previous 12 months				
<i>Paid employment</i>	25	38	25	38
Self employment	29	33	28	33
Other	n. s.	n. s.	n. s.	n. s.

1. Model 1 does not account for duration of commute.

n. s. : not statistically different from the reference category in italics.

Source: Statistics Canada, General Social Survey, 2005.

GST Other findings

Some additional statistical analyses performed are not presented in this article. One of them showed that public transit users were neither more nor less satisfied with their commutes, no matter which census metropolitan area (CMA) they lived in. In other words, public transport users in the CMA of Montréal (for example) were no more unhappy or less unhappy with their commutes than public transport users in Toronto, Vancouver or Ottawa (and vice versa).

Another analysis showed that bus riders (i.e., people who spent most of their commute on the bus) were no more likely to enjoy commuting than those who took the metro and/or the train to work. Unfortunately, it was not possible to separate suburban train passengers from metro riders.

In a third analysis, drivers who commuted alone were compared with people who car-pooled. The results showed that those who drove alone were neither more nor less likely to enjoy commuting than car-poolers.

There is also a slight difference based on workers' level of education. Workers who have a higher level of education are a little less likely to enjoy commuting than workers with less education. However, it is difficult to explain why this is so.

Conclusion

One of the important goals of urban transportation policies, common to the majority of developed countries, is to encourage greater use of public or "sustainable" modes of transportation and reduce dependence on the automobile, especially for solo commuting.⁹ In this context, it makes sense to compare the public transit users' attitudes to commuting with car drivers' attitudes.

The results of this study show that in general, car drivers are more likely than mass transit riders to like travelling to and from work. However, the attitude difference between the two groups disappears when the fact that public transportation users have to spend more time commuting between home and work is taken into account; in other words, for equal commute times, drivers and public transport users are equally likely to enjoy commuting.

These results suggest that should commuting times of public transit riders be similar to those of drivers (i.e. shorter), drivers could be more attracted to public transportation. However, other factors affect the choice between public transport and the automobile. Among others, the comfort associated with each mode; access to subsidized parking at the workplace; cost differences; and easy access to public transit near one's residence.

In conclusion, the workers who are most likely to enjoy commuting are those who bicycle to work. There are only a few brave ones in the winter, but in the summer, they are probably the ones who best live up to the old saying about combining business with pleasure.

GST

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Table A.1 Characteristics associated with liking the commute to get to work

	Dislikes or greatly dislikes	Neutral	Likes or greatly likes	Total		Dislikes or greatly dislikes	Neutral	Likes or greatly likes	Total
					%				
Mode of transportation used to get to work ¹					Season in which the GSS survey took place				
Automobile (no public transportation)	29	33	39	100	Spring	31	29	40	100
Public transportation (no automobile)	47	30	23	100	Summer	27	32	40	100
Bimodal (public transportation and automobile)	58	22 ^E	20 ^E	100	Fall	28	31	40	100
Walking	19	20	61	100	Winter	34	33	32	100
Cycling	F	34	58	100	Sex				
Other	37 ^E	28 ^E	35 ^E	100	Woman	29	32	39	100
Area of residence					Man	31	31	38	100
Toronto	36	30	35	100	Age group				
Montréal	35	28	37	100	15 to 24 years	36	31	33	100
Vancouver	34	37	29	100	25 to 34 years	33	33	35	100
Ottawa–Gatineau	36	31	33	100	35 to 44 years	30	32	38	100
Calgary	38	36	26	100	45 to 54 years	26	32	43	100
Edmonton	39	30	31	100	55 years and over	27	28	45	100
CMA of 250,000 to 750,000 residents	33	33	34	100	Language				
CMA/CA of 100,000 to 249,999 residents	25	33	42	100	English	31	32	37	100
CA of 50,000 to 99,999 residents	20	32	48	100	French	28	28	44	100
Urban region of 49,999 residents or less	20	30	49	100	Highest level of schooling attained				
Strong MIZ	24	32	44	100	Less than secondary	23	28	49	100
Rural area (moderate, weak or no influence MIZ)	21	29	50	100	Secondary diploma	29	30	41	100
Commuting duration					College or trade/technical diploma	30	32	38	100
1-29 minutes	16	28	56	100	University degree	34	34	32	100
30-59 minutes	24	34	42	100	Immigrant status				
60-89 minutes	33	35	32	100	Born in Canada	30	31	39	100
90-119 minutes	40	31	28	100	Arrived before 1980	33	31	37	100
120 minutes and over	55	26	19	100	Arrived between 1980 and 2005	27	36	37	100
Distance from workplace					Main activity in previous 12 months				
1-4 kilometers	16	25	59	100	Paid employment	30	31	38	100
5-9 kilometers	22	33	45	100	Self employment	28	32	40	100
10-14 kilometers	27	35	38	100	Other	F	F	F	100
15-19 kilometers	32	38	29	100	Assessment of paid job				
20-24 kilometers	37	34	29	100	Greatly dislikes	62	19 ^E	19 ^E	100
25-29 kilometers	35	40	25	100	Dislikes	56	26	18	100
30-34 kilometers	43	33	24	100	Neutral	38	42	20	100
35-39 kilometers	51	26	23	100	Likes	28	32	40	100
40 kilometers or over	50	28	22	100	Greatly likes	16	22	62	100

^E use with caution

^F too unreliable to be published

1. The mode of transportation used to make the greatest part of the journey (based on time).

Source: Statistics Canada, General Social Survey, 2005.



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Seniors' access to transportation

by Martin Turcotte

In today's society, it is more difficult for a person to be active and independent if their access to transportation is limited. To socialize, to acquire the basic necessities of life, to obtain other services or to go somewhere just for the fun of it – it is crucial to be able to get around. For the large majority of Canadians, this does not present a real problem. But for people who do not have a vehicle, or who live in areas badly served by public transit, getting around can severely limit their day-to-day living.

One might think that older people are more vulnerable than other Canadians to limits on their mobility. But to what extent is this really the case? And to what degree are seniors with limited access to transportation affected in their daily lives?

This article answers these questions and others using data from the 2005 General Social Survey (GSS) on time use. First, it presents information about access to transportation by different age groups; then, it discusses the impact of having either more or less access to transportation on seniors' activities and quality of life. Finally, the article examines the characteristics of those seniors who are most likely to have limited access to transportation, and are thus most likely to face restrictions in their everyday activities.

The great majority of adults and seniors have access to private or public transport

In 2005, 98% of men aged 65 to 74 and 95% of women the same age had access either to a vehicle owned by someone in their household or to public transit. These percentages declined among people in older age groups. Nevertheless, even among seniors aged 85 and over, 86% had access either to a household vehicle or to mass transit.

Larger differences appear when examining the proportion of individuals who have, at a minimum, access to a vehicle belonging to themselves or to a member of their household. Although mass transit is a perfectly satisfactory option for many people (especially for those who live in the downtown neighbourhoods of big cities), access to a private household vehicle makes less routine travel easier, during an emergency for example. In 2005, 80% of seniors had access to a household vehicle, compared with 91% of 55- to 64-year-olds. (See "What you should know about this study" for a definition of the concepts relating to access to a household vehicle.)

Men are much more likely to have access to a household vehicle as drivers

The split between the different age groups is even larger in terms of access to a household vehicle as a *driver*. Indeed, 71% of people aged

65 and over were able to take the wheel of a vehicle owned by the household, compared with 88% of those aged 55 to 64. The discrepancy between senior men and women was particularly large in older age groups. For example, among 75- to 84-year-olds, 83% of men had vehicle access as a driver, in contrast to only 45% of women. Among those 85 and older, the proportion of men able to drive a household vehicle was twice as high, at 66% versus 33% of women.

These differences between the sexes are not really surprising because senior men are much more likely to own a valid driver's licence than women. There are also proportionally fewer men than women who have never driven a car in their lives. This gap will narrow over time, however, as the baby boomers enter their later years.¹ Indeed, almost as many women as men Boomers are car-drivers or car-owners. According to some researchers, this generation of women will cause a considerable rise in automobile use among seniors as they age over the coming years.²

Is better access to transport linked to a more active life?

Almost all seniors have "theoretical" access to transportation, whether it is their own vehicle, public transport or the help of a friend or family member. Despite this, a person's level of mobility – that is, their ability to get up and go where they want when they want – can vary considerably from

one person to another. Obviously, a senior who owns a car and a driver's licence, or who has the financial means to use a taxi to run his errands, can travel about much more easily than an older person who must rely on her son or daughter to take her shopping.

The 2005 GSS on time use can shine new light on the possible consequences of having more or less access to transportation, particularly with respect to leading an active life. More specifically, it can help to ascertain whether seniors who have better transportation options are more likely to leave their house on a given day, and whether they are more likely to engage in volunteer activities.

Seniors without access to a car or public transport are less likely to go out

Many authors and specialists in the field of gerontology maintain that access to transport is essential to the quality of life of seniors, contributing substantially (among other things) to their level of independence and their freedom to go out whenever it suits them.³

There is a multitude of reasons to leave the house on any given day: to

go shopping, to get to an appointment, to travel to work, to take part in leisure activities or organized sports. Is a senior's level of access to transportation associated with their chances of going out and, implicitly, with the likelihood they will have done one or another of these activities?

To answer this question, a statistical analysis was performed. In addition to access to transport, the analytical model took account of a number of different factors that can also influence the probability of spending all day at home, including age, sex, health status, the presence or absence of limitations affecting a person's activities in relation to transportation or leisure, and so on.

To conduct the analysis, seniors were divided into four groups according to their level of access to transportation: 1) owned a vehicle and a valid driver's licence (71% of seniors); 2) did not have a valid driver's licence but did have access to a household vehicle as a passenger (9%); 3) did not have access to a vehicle but did have access to public transit (14%); 4) had access to neither a household vehicle nor public transit (6% of seniors).

The results of the statistical model clearly show that when a person has access to neither public transport nor a household vehicle, they have a higher probability of not leaving the house during the reference day. Keeping all other factors in the model constant, the predicted probability that people with limited access to transportation would stay at home was 49%.

In contrast, seniors with a valid driver's licence and a car were the most likely to have gone out at least once: the predicted probability that they would have spent the day at home was only 19%.

Seniors who were able to use a car as *passengers*, as well as those with public transit available, lay between these extremes. They shared a 32% predicted probability of having been at home all day, always holding all other factors in the model constant.⁴

These results do not mean that people without a driver's licence or access to public transit are more likely to stay at home only because they are limited by inadequate access to transportation and have no other choice. Other factors not included in the analysis can also have an impact. It is possible, for example, that some

<div>GST</div> <div>Most seniors have access to some means of transportation</div>									
Age	Access to a household vehicle or public transportation			Access to a household vehicle (with or without a driver's licence)			Access to a household vehicle, with a valid licence		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	%								
25 to 34	98	99	97	85	87	83	82	85	79
35 to 44	98	98	98	89	92	87	86	90	82
45 to 54	98	98	98	90	92	87	87	91	84
55 to 64	98	98	97	91	94	89	88	94	83
65 to 74	96	98	95	87	93	83	80	90	70
75 to 84	93	97	90	72	88	62	61	83	45
85 and over	86	91	82	53	68	44	46	66	33
65 and over	94	97	92	80	89	72	71	86	58

Source: Statistics Canada, General Social Survey on time use, 2005.

Definition of concepts and variables

Access to a household vehicle and access to a household vehicle as a driver

These categories were created by combining respondents' responses to three different questions in the General Social Survey 2005 on time use.

- Do you have a valid driver's licence?
- Do you or does any member of your household lease or own a vehicle (includes a car, van, jeep or truck)?
- Do you have this car or truck at your disposal all the time, most of the time, rarely or never?

For purposes of this study, only people who had the household vehicle(s) at their disposal all the time or most of the time were considered to have access to a vehicle.

People who had a driver's licence and used the vehicle either mostly as a driver or as both a driver and a passenger (with a driver's licence) were considered to have access to a household vehicle as a *driver*.

Access to public transportation

Respondents in households whose members did not have a vehicle and respondents who did not have access to a household vehicle (as a driver or passenger) were asked the following question to determine whether they had access to public transportation:

- Is public transportation, for example, bus, rapid transit or subway, available to you?

People who did not leave their residence the previous day

In the 2005 General Social Survey, respondents were asked what activities they engaged in the day before the telephone interview (as well as where these activities had taken place).

This made it possible to distinguish between people who did not go out and people who went out at least once (for any reason). It should be noted that doing yard work outside one's house, for example, is not considered leaving one's residence.

Mobility

In this article, mobility refers to people's ability to go where they want when they want. It refers exclusively to travel outside the home. This concept has nothing to do with the kind of mobility that involves moving to a new house or changing place of residence.

Methodology and statistical models

The predicted probabilities shown in the table were calculated using two logistical regressions. They represent the estimated probability that a senior with a particular characteristic (for example, having a vehicle and a driver's licence) remained at home the whole day (or did volunteer work) after all the other factors in the regression model were controlled for, i.e., held constant at the average value for the sample in question.

Additional statistical analyses, which included other variables, were also performed. They showed that there was no statistically significant relationship between the season and the probability of not having gone out the previous day; in other words, the probability of going out at least once during the day was just as high in winter as in summer. Urban or rural residence was also included in these supplementary analyses, but once again, no statistically significant relationship was found. This does not mean, though, that seniors in rural areas are less vulnerable (the charts in the article show the opposite) but rather that the critical factor is access to a vehicle or to public transportation, and not area of residence as such.

people do not have a driver's licence because they do not need one or because they are homebodies by nature.

That being said, it is likely that the difficulty faced by seniors without access to a car or public transit is an important reason why they had a greater tendency to remain at home. For them, having transport available could be limited to asking relatives for help getting from one place to another. As suggested by

certain studies based on focus group discussions, seniors who must rely on relatives to drive them often limit their travel as much as possible for fear of being a nuisance to their family.⁵

Seniors with university degrees are least likely to stay at home

Other factors are also associated with the probability of not leaving the house on the reference day. Firstly, older seniors were more likely than

their younger counterparts to have spent the whole day at home; this is not very surprising since levels of activity generally fall with age.

Secondly, seniors were less likely to have left the house the day before if their ability to travel or take part in leisure activities was *often* limited due to a physical condition, a mental state or a health problem: the predicted probability that they had stayed at home the previous day was 36%, compared with 21% for those whose

	Predicted probability...			Predicted probability...	
	of not having left the house the previous day	of having done volunteer work last year		of not having left the house the previous day	of having done volunteer work last year
	%			%	
Access to transportation					
<i>Has a driver's licence and a vehicle</i>	19	32	Total number of people considered close		
<i>Has a vehicle but no licence</i>	32	15	<i>0 to 4</i>	27	16
<i>Access to public transportation</i>	32	21	<i>5 to 9</i>	n. s.	n. s.
<i>No access to transportation</i>	49	17	<i>10 to 20</i>	n. s.	34
Sex					
<i>Male</i>	n. s.	23	<i>More than 20</i>	21	40
<i>Female</i>	24	31	Highest level of education		
Age					
<i>65-74</i>	19	27	<i>Did not graduate from high school</i>	28	20
<i>75-84</i>	28	n. s.	<i>High school graduation</i>	n. s.	n. s.
<i>85+</i>	35	n. s.	<i>College or trade school diploma</i>	n. s.	30
Perceived health					
<i>Excellent or very good</i>	n. s.	n. s.	<i>University degree</i>	14	47
<i>Good, fair or poor</i>	22	27	Household income		
Activity limitations for transportation or leisure					
<i>Yes, often</i>	36	18	<i>Less than \$20,000</i>	26	27
<i>Yes, sometimes</i>	n. s.	n. s.	<i>\$20,000 - \$39,999</i>	n. s.	n. s.
<i>No</i>	21	29	<i>\$40,000 or more</i>	n. s.	n. s.
Living arrangements					
<i>Lives alone</i>	21	28	Owns residence		
<i>Lives with spouse only</i>	n. s.	n. s.	<i>Yes</i>	26	n. s.
<i>Lives with spouse and other people</i>	36	n. s.	<i>No</i>	15	26
<i>Other arrangement</i>	n. s.	n. s.	Born in Canada		
			<i>Yes</i>	n. s.	n. s.
			<i>No</i>	23	22
			Region of residence		
			<i>Atlantic</i>	n. s.	n. s.
			<i>Quebec</i>	n. s.	n. s.
			<i>Ontario</i>	22	30
			<i>Prairies</i>	n. s.	n. s.
			<i>British Columbia</i>	n. s.	n. s.

n. s. : Difference is not statistically significant relative to the reference category in italics.
Source: Statistics Canada, General Social Survey on time use, 2005.

activities were not curtailed (always keeping constant the other factors in the analysis including, among others, the respondent's age). Other studies have also shown this association between the existence of physical limitations and the reduction in the amount of travel undertaken.⁶

Thirdly, seniors with the largest social networks (they considered themselves close to 20 or more people) did not remain at home as much as those whose networks were small (less than five people). This connection is understandable

since one of the main reasons older people go out is to visit close friends or family and to take part in social activities (compared to younger Canadians, who most often leave the house to travel to work and back).⁷

Finally, the probability of being at home the whole day differs between seniors with a university degree and those without a high school diploma. Seniors who held degrees were only half as likely to have spent the reference day around the house than seniors who had not completed a high school education

(predicted probabilities of 14% and 28%, respectively). On the whole, seniors having a higher level of education are more inclined to be active in the labour market, to do volunteer work, to be members of an organization or to participate in other ways in civic activities.⁸ All of these activities generally require that a person be somewhere other than home, which probably explains in part the difference observed between seniors depending on their educational attainment.

Some authors have hypothesized that the more active lifestyle enjoyed by the baby boomers (travel, leisure, golf, and so on), in conjunction with their greater reliance on the automobile, will contribute significantly to seniors' mobility in the future.⁹ Given this fact, it is likely that the coming years will see an increase in the share of vehicle pollution attributable to older people being out and about.¹⁰

Seniors with a car and a driver's licence are most likely to have done volunteer work

To maintain an active life, as well as to "get involved" and help members of their community, many older people do volunteer work. While the proportion of seniors who volunteer is basically the same as that in other age groups, the average number of hours they devote is greater.¹¹ One of the conditions necessary for participating in voluntary activities is the ability to get easily to the location where those activities are taking

place. Does having better access to transportation encourage seniors to volunteer?

According to the results of a statistical analysis that examined volunteer work as a function of the level of access to transportation, it seems that the answer is yes. Indeed, when holding constant the effect of other factors in the model, the predicted probability that an older person with a household vehicle and a driver's licence had done volunteer work in the preceding year was 32%. In contrast, the probability was 17% for those with neither a car nor public transit, and 15% for those with access to a vehicle but only as a passenger.

To our knowledge, no previous study has empirically demonstrated this association between seniors' access to a vehicle and a driver's licence, on one hand, and the probability of volunteering on the other.¹² What does it mean? One possible explanation is that certain volunteer activities, for example

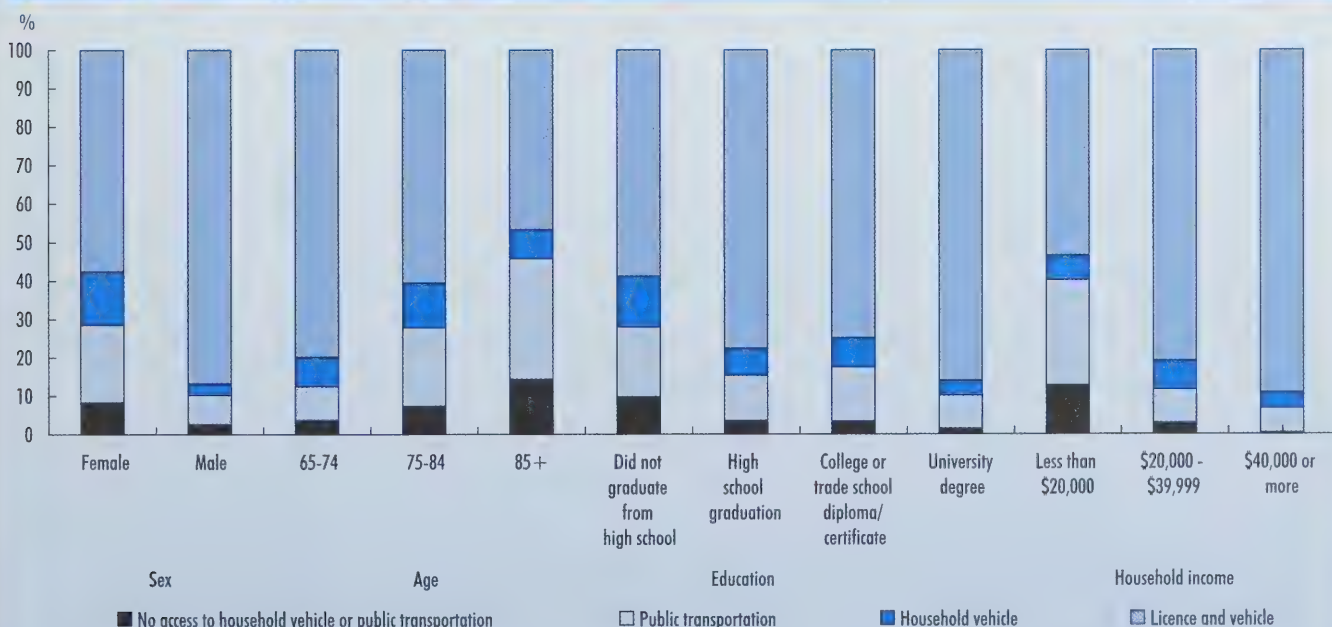
helping other seniors complete certain household tasks or deliver groceries, effectively demand a driver's licence. More generally, it is simply easier to get to volunteer activities if a person has a car than if they have to depend on public transit or on a household member to drive them there.

Seniors living in rural areas are most likely to have limited access to transportation

As shown by this study, people whose mobility is limited, and particularly those who have access to neither a household vehicle nor public transit, are less likely to have left their house during the reference day or to have done volunteer work in the previous year. One would expect that their restricted access to transportation would affect many aspects of their lives; for example, seniors would presumably find it more difficult to get to a doctor's appointment, to visit family members, to participate in various social activities and so on.

CST

Women and seniors with lower incomes are more likely to be disadvantaged with respect to access to transportation



Source: Statistics Canada, General Social Survey on time use, 2005.

It thus becomes important to develop a profile of those seniors who are the most (and the least) likely to have limited access to transportation.

Not surprisingly, certain socio-economic characteristics are strongly associated with the probability that a senior lacks sufficient access to transportation. Seniors with household incomes under \$20,000 were particularly vulnerable to belonging to this group (13%). In contrast, close to 90% of seniors living in households with incomes over \$40,000 owned a vehicle and had access to it as a driver; almost no senior in this income category struggled with inadequate transportation. The same was observed among those with a high level of educational attainment. Also, women and seniors aged 85 and over were much more likely to be limited in their ability to "get around town" than men and 65- to 74-year-olds.

Having access to a household vehicle as a driver does not differ much between regions of the country. The most marked disparity was found

between the Atlantic Provinces, where 9% of seniors did not have access to a household vehicle or to public transit, and British Columbia, where only 3% of seniors reported that their mobility was severely limited.

The splits between rural and urban areas are, however, more pronounced. Compared with seniors living in urban areas (especially those in the most densely populated neighbourhoods of census metropolitan areas), seniors in rural areas are much less likely to have access to public transport. While proportionally more rural seniors owned a vehicle and were able to drive it, they more often found themselves in a vulnerable position regarding mobility. According to some authors, this situation would suggest that older persons living in rural areas without a car are particularly at risk for social isolation, as well as difficulty in accessing community and medical services.¹³

Summary

The majority of studies that address the issue of transportation in the

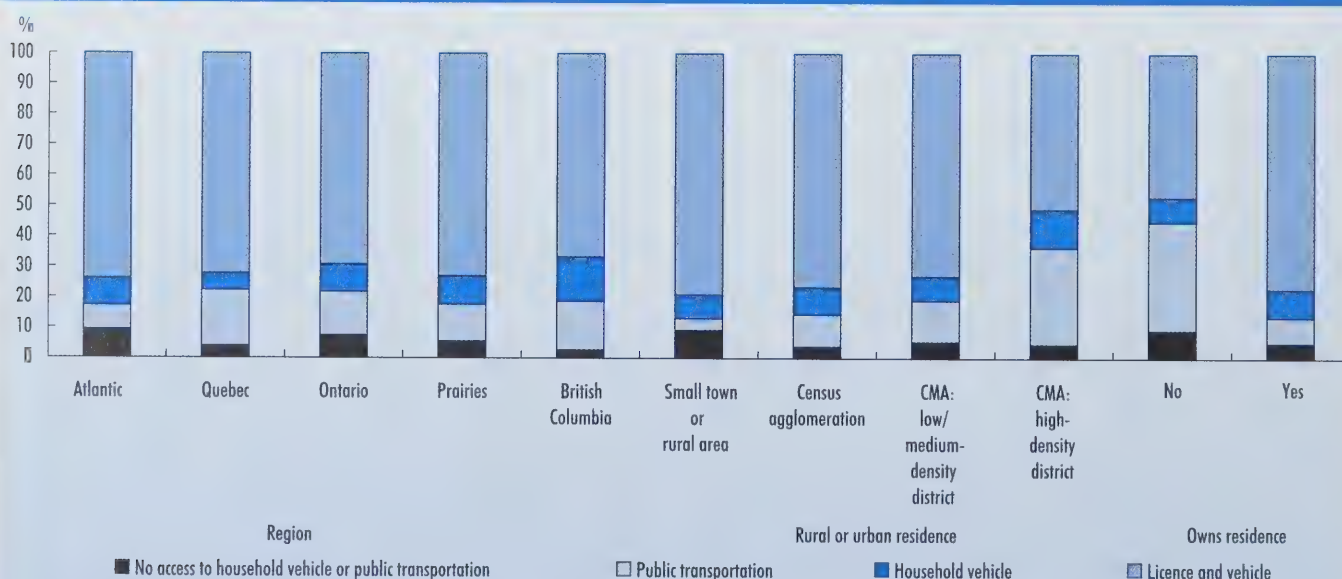
senior population concern themselves with questions of safety, for example the risk of road accidents and the risks of injury or death.¹⁴ Other analyses try to develop appropriate policies to limit the driving of seniors considered "at risk", without creating more age discrimination.¹⁵ Still other researchers, concerned about the increasing dependence of older people on the automobile, have wondered about the environmental consequences of seniors' driving habits.¹⁶

The approach adopted in this study is different. Analysis of the data from the 2005 GSS has demonstrated (among other things) that when seniors have inadequate access to means of transportation, it can translate into negative consequences for their daily lives, among others a lesser probability of getting out of the house on a given day and a lesser probability of having done volunteer work in the preceding year.

This study has also shown that older people who are completely deprived of transportation constitute

CST

Residents of rural areas are more likely to have a driver's licence, but also to have limited access to transportation



1. Based on the number of residents per square kilometre in the census tract. A low- or medium-density census tract has a population of less than 3,600 per square kilometre. About two-thirds of the elderly population live in low- or medium-density districts.

Source: Statistics Canada, General Social Survey on time use, 2005.

One of the things that contribute to the well-being of seniors, aside from their health, their independence and their financial security, is the opportunity to socialize and have meaningful contact with others. The risk of isolation is probably greater for those who live alone than for those who live with their spouse or other people. And the risk of social isolation is probably even higher when access to transportation is limited, which may make it more difficult to visit friends or take part in social activities.¹

The data from the General Social Survey on time use provide some support for this idea. Sixty-one percent of seniors who lived alone but had a vehicle engaged in some kind of social activity on the reference day (e.g., visiting someone else's home, having a visitor at their home, or going to a restaurant with another person). In contrast, only 47% of those who only had access to public transportation and 42% of those who had no access to a vehicle or to public transportation had engaged in that kind of social activity.

More generally, the proportion of people who had no access to a vehicle or public transportation and spent

the whole of the previous day alone was higher than the proportion of people who had a driver's licence. People who have more limited access to transportation may have a lower tendency to want many social relationships than those who have a licence.

Nevertheless, it is quite plausible to conclude that many seniors were limited in their social activities because of their problem with access to transportation. The difference in social activity between seniors who lived alone and had access to a private vehicle and other seniors remained significant, even when other factors in a statistical model were controlled for (results not presented here), such as size of social network, age, income, education and limitations on activities related to leisure and travel.

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a minority of the senior population. Moreover, there are indications that seniors' vulnerability to transportation problems will diminish considerably as the baby boom enters its golden years. Indeed, the members of this generation have higher incomes and are more likely than the current generation of seniors (men as well as women) to have had access (and to continue to have access) to a private vehicle. Consequently, it is probable that seniors' use of transportation will change considerably with a new generation of older people.

Before the baby boom generation reaches its 65th year, though, one must nevertheless remember that some people, among them women and people aged 85 and over living in rural areas, are particularly vulnerable to having limited mobility. As has been seen in this study, restricted access can have a concrete impact

on their quality of life and their ability to live an active life.



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4. It is important to note that for seniors having a valid driver's licence and owning a car, their greater probability of having gone out during the reference day cannot be explained by the fact that they are younger, in better health or less limited in their activities in terms of travel or leisure; these factors were kept constant in the statistical analysis. If these factors were not taken into account, the difference in the propensity to leave the house between seniors having a licence and a car and those in the other groups would be even larger.
5. Glasgow, N. and R. M. Blakely. 2000. "Older Nonmetropolitan residents' evaluations of their transportation arrangements," *The Journal of Applied Gerontology* 19 (1): 95-116.

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11. Hall, M., D. Lasby, G. Gumulka and C. Tryon. 2006. *Caring Canadians, Involved Canadians: Highlights from the 2004 Canada Survey of Giving, Volunteering and Participating* (Statistics Canada Catalogue no. 71-542-XIE) Ottawa, Statistics Canada.
12. For a description of the different factors that have been identified in studies as influencing voluntary participation, see J. Wilson, 2000. "Volunteering," *Annual Review of Sociology* 26: 215-240.
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Social indicators

	1971	1981	1991	1999	2000	2001	2002	2003	2004	2005
Population										
Population of Canada, in thousands										
Canada	21,962	24,820	28,031	30,404	30,689	31,021	31,373	31,669	31,974	32,271
Population by province, in thousands										
Newfoundland and Labrador	531	575	580	533	528	522	519	518	517	516
Prince Edward Island	113	124	130	136	136	137	137	137	138	138
Nova Scotia	797	855	915	934	934	932	935	936	938	938
New Brunswick	642	706	746	751	751	750	750	751	752	752
Quebec	6,137	6,548	7,065	7,323	7,357	7,397	7,446	7,494	7,548	7,598
Ontario	7,849	8,811	10,428	11,506	11,685	11,898	12,102	12,260	12,407	12,541
Manitoba	999	1,036	1,110	1,142	1,147	1,151	1,156	1,162	1,170	1,178
Saskatchewan	932	976	1,003	1,015	1,008	1,000	996	995	994	994
Alberta	1,666	2,294	2,593	2,953	3,005	3,057	3,116	3,160	3,205	3,257
British Columbia	2,240	2,824	3,373	4,011	4,039	4,078	4,115	4,155	4,202	4,255
Yukon Territory	19	24	29	31	30	30	30	31	31	31
Northwest Territories	..	..	39	41	40	41	41	42	43	43
Nunavut	..	..	22	27	28	28	29	29	30	30
Northwest Territories including Nunavut	36	48	..	..	..	..	..	..	..	..
Population by age groups, in thousands										
0 to 7 years	3,160	2,875	3,122	3,042	2,990	2,948	2,904	2,853	2,815	2,793
8 to 17 years	4,610	4,039	3,815	4,116	4,148	4,174	4,186	4,185	4,182	4,175
18 to 29 years	4,448	5,716	5,376	4,962	4,987	5,033	5,111	5,184	5,256	5,301
30 to 44 years	3,913	5,123	7,057	7,565	7,543	7,532	7,503	7,446	7,390	7,336
45 to 64 years	4,068	4,690	5,444	6,933	7,168	7,411	7,675	7,934	8,189	8,447
65 to 74 years	1,088	1,487	1,923	2,135	2,146	2,161	2,175	2,191	2,216	2,236
75 years and over	636	827	1,199	1,526	1,576	1,626	1,675	1,724	1,767	1,812
Dependency ratio¹ expressed as percentage										
Age group 0 to 17 years	62.5	44.5	38.8	36.8	36.2	35.7	34.9	34.2	33.6	33.0
Age group 65 years and over	14.2	15.3	18.0	19.5	19.6	19.6	19.7	19.8	19.9	20.0
		1981	1991	1999	2000	2001	2002	2003	2004	2005
Components of population change, in thousands										
Births		372	403	338	337	327	328	331	336	338
Deaths		171	192	218	217	219	220	225	231	235
Immigrants		127	221	173	206	253	256	199	239	245
Emigrants		45	44	48	48	48	39	35	36	36
			1991	1999	2000	2001	2002	2003	2004	2005
Population for largest census metropolitan areas, in thousands										
Montréal			3,291	3,438	3,471	3,507	3,547	3,579	3,610	3,636
Toronto			4,030	4,646	4,747	4,884	5,020	5,117	5,214	5,304
Vancouver			1,647	2,013	2,040	2,076	2,111	2,142	2,174	2,208
Ottawa-Gatineau			961	1,057	1,078	1,103	1,119	1,132	1,141	1,149

.. not available for a specific reference period

1. The ratio of the combined young (aged 0 to 18) and senior (aged 65 and over) populations to the working population (aged 18 to 64).

Sources: Statistics Canada, CANSIM, tables 051-0001, 051-0004, 051-0011, 051-0013 and 051-0034.

Social indicators (continued)

	1981	1991	1999	2000	2001	2002	2003	2004	2005
Interprovincial net migrants									
Newfoundland and Labrador	-4,243	-711	-5,695	-4,263	-4,493	-3,352	-1,683	-2,027	-1,875
Prince Edward Island	-1,046	-544	193	104	165	62	165	144	-222
Nova Scotia	-3,345	573	201	-270	-2,077	-898	510	-772	-473
New Brunswick	-4,975	928	-1,244	-1,183	-1,530	-1,218	-843	-760	-1,650
Quebec	-23,476	-13,093	-13,065	-12,146	-9,442	-4,350	-1,829	-822	-2,332
Ontario	-33,932	-10,947	16,706	22,369	18,623	5,354	637	-6,935	-8,375
Manitoba	-8,847	-7,687	-2,113	-3,456	-4,323	-4,344	-2,875	-2,565	-3,832
Saskatchewan	-3,604	-11,783	-4,333	-7,947	-8,410	-8,820	-5,141	-4,521	-4,583
Alberta	45,991	8,647	25,191	22,674	20,457	26,235	11,903	10,606	16,615
British Columbia	39,008	34,108	-14,484	-14,610	-8,286	-8,556	-1,037	7,865	7,456
Yukon Territory	-1,283	477	-747	-691	-572	-221	149	27	-6
Northwest Territories	..	..	-555	-651	-160	84	242	-105	-427
Nunavut	..	..	-55	70	48	24	-198	-135	-296
Northwest Territories including Nunavut	-248	32	..	..	..	..	..	..	..

	1976	1981	1989	1999	2000	2001	2002	2003	2004	2005
Labour force										
Labour force										
Labour force, in thousands	10,491.30	12,235.80	14,057.00	15,588.30	15,847.00	16,109.80	16,579.30	16,958.50	17,182.30	17,343.00
Total employed, in thousands	9,747.50	11,305.00	12,996.20	14,406.70	14,764.20	14,946.20	15,310.40	15,672.30	15,947.00	16,170.00
Labour force participation rate, in percent										
Men - Age 15 and over	77.7	78.4	76.8	72.4	72.4	72.3	73.0	73.4	73.2	72.8
15 to 24 years	68.9	73.6	73.8	65.3	65.9	66.1	67.8	68.3	67.8	66.1
25 to 54 years	94.5	94.6	93.5	91.1	91.0	91.1	91.5	91.6	91.6	91.5
55 years and over	47.2	44.3	37.4	33.2	33.3	33.6	35.6	37.6	38.4	39.1
Women - Age 15 and over	45.7	52.0	58.1	58.9	59.4	59.7	60.9	61.9	62.0	61.8
15 to 24 years	58.2	64.8	68.5	61.5	62.8	63.2	65.3	66.5	66.2	65.8
25 to 54 years	52.3	62.6	74.4	78.2	78.5	79.1	80.4	81.1	81.5	81.1
55 years and over	17.7	17.6	16.8	18.1	19.0	19.4	20.9	23.2	24.1	24.9
Unemployment rate, in percent										
15 years and over	7.1	7.6	7.5	7.6	6.8	7.2	7.7	7.6	7.2	6.8
15 to 24 years	12.4	12.8	10.9	14.0	12.7	12.9	13.6	13.6	13.4	12.4
25 to 54 years	5.3	6.0	6.8	6.4	5.8	6.2	6.6	6.5	6.0	5.8
55 years and over	3.9	4.2	5.7	5.5	5.1	5.5	5.8	5.9	5.6	5.1
Percentage of workers in service-producing sector ¹										
Total	65.4	67.3	70.6	74.0	74.1	74.7	74.7	75.0	75.0	75.2
Men	55.8	56.8	59.6	63.4	63.3	63.9	63.8	64.1	64	64.1
Women	81.8	82.7	84.6	86.5	86.8	87.3	87.1	87.4	87.4	87.8
15 to 24 years	69.4	71.0	76.5	80.2	80.2	81.5	81.4	81.8	81.4	81.6
25 to 54 years	63.9	66.3	69.5	73.3	73.2	73.5	73.5	73.5	73.6	74.0
55 years and over	64.6	64.2	66.6	70.3	71.9	73.2	73.1	74.5	74.9	74.4

not available for a specific reference period

1. Service-producing sector includes wholesale and retail trade; transportation and distribution; finance, insurance, real estate and leasing; professional, scientific and technical services; business services; food, accommodation and other services; information, cultural and recreation services; education, health care and social services; and public administration.

Sources: Statistics Canada, CANSIM, table 051-0018 and Labour Statistics Division.



Social indicators (continued)

	1976	1981	1989	1999	2000	2001	2002	2003	2004	2005
Percentage of workers employed part-time										
Total	12.5	14.8	16.6	18.4	18.1	18.1	18.8	18.9	18.5	18.3
Men	5.9	7.2	8.7	10.3	10.3	10.5	11.0	11.1	10.9	10.8
Women	23.6	26.1	26.7	27.9	27.2	27.0	27.7	27.9	27.2	26.8
15 to 24 years	21.1	24.9	34.5	44.1	43.6	43.4	44.9	45.1	44.7	44.6
25 to 54 years	8.8	10.7	11.3	12.6	12.2	12.3	12.5	12.5	12.1	12.0
55 years and over	13.3	15.3	20.0	21.9	21.9	21.1	22.6	22.9	22.5	21.9
Percentage of workers self-employed										
Total	12.2	12.6	13.9	16.9	16.1	15.2	15.1	15.3	15.4	15.5
Men	14.2	15.1	17.0	20.3	19.3	18.7	18.3	18.8	19.0	19.1
Women	8.6	8.9	9.8	12.9	12.3	11.2	11.4	11.3	11.2	11.4
15 to 24 years	5.7	5.7	5.5	6.5	5.1	4.0	4.3	4.5	4.1	4.0
25 to 54 years	13.3	13.9	14.4	16.7	16.2	15.4	15.1	15.2	15.2	15.4
55 years and over	20.3	20.8	26.8	34.0	31.8	30.1	29.8	29.7	29.5	28.8
				1999	2000	2001	2002	2003	2004	2005
Percentage of employees in temporary jobs²										
Total				12.0	12.5	12.8	12.9	12.4	12.8	13.2
Men				11.5	11.8	12.0	12.3	12.0	12.0	12.5
Women				12.5	13.2	13.7	13.6	12.9	13.5	13.9
15 to 24 years				28.1	29.1	30.1	29.6	28.3	29.3	29.9
25 to 54 years				8.6	8.8	8.9	9.2	8.8	9.0	9.3
55 years and over				9.5	10.6	10.7	10.8	10.9	10.6	11.7
Percentage of unionized³ employees										
Total				32.3	32.4	32.3	32.2	32.2	31.7	32.0
Men				33.2	33.2	33.0	32.4	32.7	31.7	32.1
Women				31.3	31.4	31.6	32.0	31.8	31.7	32.0
15 to 24 years				13.5	14.3	15.2	15.4	15.4	14.8	15.8
25 to 54 years				36.1	36.1	35.8	35.8	35.5	35.0	35.1
55 years and over				36.5	36.8	37.1	36.1	38.0	37.2	37.5

2. Temporary jobs include seasonal jobs, term or contract jobs, casual jobs and other temporary jobs of an unspecified nature.

3. Includes employees who are unionized or non-unionized but are covered by a collective agreement.

Source: Statistics Canada, Labour Statistics Division.



Social indicators (continued)

	1981	1989	1997	1999	2000	2001	2002	2003	2004
Income									
Average market income, ¹ 2004 constant dollars									
Economic families, two persons or more ²	60,000	63,100	58,900	63,500	66,400	67,000	66,900	66,300	68,100
Unattached individuals ³	24,700	24,600	20,800	23,700	23,800	24,500	25,000	25,800	25,800
Average total income ⁴ of persons who are income recipients, including transfer payments, 2004 constant dollars									
All age groups	30,200	31,500	29,500	31,300	32,100	32,600	32,500	32,400	33,000
Under 20 years	8,200	7,700	5,700	6,300	6,200	6,800	6,000	6,300	6,300
20 to 24 years	22,700	20,500	13,200	14,800	15,300	15,700	15,500	15,000	15,200
25 to 34 years	34,600	33,100	29,400	30,900	32,100	32,700	33,300	32,100	33,200
35 to 44 years	41,200	41,900	36,300	40,400	41,000	41,700	40,400	40,900	40,800
45 to 54 years	40,200	41,300	40,600	41,000	43,100	42,300	43,000	43,000	44,600
55 to 64 years	33,200	33,500	30,800	32,400	33,000	34,500	34,900	35,100	35,100
65 years and over	20,000	23,600	24,000	24,600	24,700	25,100	25,600	25,600	26,200
Average total income by family type, including transfer payments, 2004 constant dollars									
Economic families, two persons or more	65,100	70,000	67,200	71,200	73,800	75,000	74,800	74,300	76,100
Unattached individuals	28,800	29,700	26,900	29,300	29,300	30,100	30,700	31,300	31,200
Average after-tax income for economic families of two persons or more, 2004 constant dollars									
All quintiles	55,100	56,500	53,900	57,400	59,200	61,500	61,600	61,100	62,700
Lowest quintile	20,400	21,700	18,900	20,500	20,500	22,000	21,500	21,800	22,300
Second quintile	37,900	38,500	34,100	36,800	37,200	38,600	38,500	38,400	39,100
Third quintile	51,100	51,500	47,500	50,500	51,400	53,300	53,300	53,300	54,200
Fourth quintile	65,500	66,600	63,700	67,500	69,000	71,200	71,800	71,300	72,700
Highest quintile	100,500	104,100	105,400	111,600	117,800	122,700	122,800	120,800	125,000
Percentage distribution of husband-wife families by earnings characteristics ⁵									
All husband-wife families	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total dual-earner families	55.4	62.6	60.8	62.1	63.0	63.7	63.6	64.3	64.8
Dual-earner families, wife earned more than husband	8.9	11.8	15.7	15.4	16.3	16.3	16.8	18.0	18.0
Total single-earner families	33.7	23.0	23.3	22	22.1	21.5	22.0	21.6	21.3
Single-earner families, wife sole earner	2.5	3.4	5.0	5.2	5.4	5.2	5.3	5.3	5.0
Neither spouse had earnings	10.9	14.4	15.9	15.9	14.9	14.7	14.4	14.1	13.9
Female-to-male earnings ratio, ⁵ in percent									
Full-year full-time workers	63.5	65.8	68.3	68.4	70.6	69.9	70.2	70.2	69.9
Prevalence of low income after tax, in percent, based on 1992 low income cut-offs									
All persons	11.6	10.2	15.3	13.0	12.5	11.2	11.6	11.6	11.2
Persons under 18 years	12.4	11.7	17.8	14.4	13.8	12.1	12.2	12.5	12.8
Persons 18 to 64 years	9.9	9.4	15.5	13.4	12.9	11.7	12.1	12.2	11.7
Persons 65 years and over	21.0	11.3	9.1	7.8	7.6	6.7	7.6	6.8	5.6
Males, 65 years and over	14.2	6.1	5.6	4.7	4.6	4.6	4.9	4.4	3.5
Females, 65 years and over	26.3	15.1	11.8	10.3	10.0	8.3	9.7	8.7	7.3

1 Market income is the sum of earnings (from employment and net self-employment), net investment income, private retirement income and "Other income". It is equivalent to total income minus government transfers.

2 An economic family is a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common law or adoption.

3 An unattached individual is a person living either alone or with others to whom he or she is unrelated, such as roommates or lodgers.

4 Total income equals market income plus government transfers (including Old Age Security pension and Guaranteed Income Supplement, benefits from Canada or Quebec Pension Plan, benefits from Employment Insurance, social assistance payments, Canada Child Tax benefits, workers' compensation, GST and HST credits and government transfers).

5 Includes earnings from both paid employment (wages and salaries) and self-employment.

Sources: Statistics Canada, CANSIM, tables 202-0102, 202-0105, 202-0202, 202-0403, 202-0407, 202-0701 and 202-0802.



Social indicators (continued)

	1981	1989	1997	1999	2000	2001	2002	2003	2004
Prevalence of low income after tax, in percent, by family type, based on 1992 low income cut-offs⁶									
All family units	16.2	14.1	20.0	17.5	16.8	15.5	15.5	15.6	15.2
Economic families, two persons or more	8.9	7.5	11.5	9.5	9.0	7.9	8.6	8.5	7.8
Elderly families	9.4	3.7	3.9	2.9	3.1	2.5	2.9	2.7	2.1
Non-elderly families	8.8	8.2	12.7	10.6	10.0	8.8	9.5	9.5	8.8
Two-parent families with children	7.2	6.3	10.3	8.1	8.3	6.9	6.5	6.7	6.7
Lone-parent families	41.0	38.9	45.4	36.1	32.3	30.1	34.2	34.0	31.7
Male lone-parent families	11.6	11.7	21.4	18.1	12.3	12.3	12.2	12.8	14.2
Female lone-parent families	46.0	42.5	49.3	39.4	36.3	33.8	39.4	38.8	35.6
Unattached individuals	35.5	28.9	37.9	34.0	32.9	30.8	29.5	29.6	29.6
Elderly males	39.0	18.8	17.2	17.2	17.6	16.8	15.9	14.7	11.6
Elderly females	53.5	31.9	23.7	22.3	21.6	18.6	20.7	18.9	17.0
Non-elderly males	24.8	24.9	39.8	35.4	32.1	30.3	29.0	30.7	31.5
Non-elderly females	35.5	34.1	49.5	43.4	44.3	42.1	39.0	38.0	38.4
After-tax income distribution, share of after-tax income in percent, for all family units, economic families and unattached individuals									
All quintiles	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lowest quintile	5.3	5.6	4.8	4.8	4.6	4.8	4.9	4.9	4.8
Second quintile	11.9	11.6	10.8	10.9	10.7	10.7	10.7	10.7	10.7
Third quintile	18.1	17.6	16.7	16.7	16.5	16.4	16.4	16.5	16.4
Fourth quintile	24.9	24.5	24.5	24.3	24.2	24	24.0	24.1	24.0
Highest quintile	39.8	40.6	43.2	43.3	44.0	44.0	43.9	43.7	44.0
Gini coefficient⁷ of after-tax income									
All family units, economic families and unattached individuals	0.348	0.351	0.385	0.386	0.392	0.392	0.391	0.389	0.393
	1981	1991	1997	2000	2001	2002	2003	2004	
Health									
Fertility rate									
Per woman		1.65	1.7	1.55	1.49	1.51	1.5	1.53	1.53
	1981	1991	1997	1999	2000	2001	2002	2003	2004
Infants									
Birth weight less than 2,500 grams	21,219	22,315	20,060	18,970	18,242	18,432	..	18,800	19,560
Proportion of low birth weight births	5.9	5.5	5.8	5.6	5.6	5.5	..	5.7	5.9
Total infant deaths, age at time of death, under 1 year	3,562	2,573	1,928	1,776	1,737	1,739	1,762	1,762	1,765
Mortality rate per 1,000 live births	9.6	6.4	5.5	5.3	5.3	5.2	5.4	5.4	5.3
	1991	1997	1999	2000	2001	2002	2003	2004	
Life expectancy in years									
Males at birth		72.1	74.6	75.7	76.2	76.7	77.0	77.2	77.4
Females at birth		79.3	80.9	81.3	81.7	81.9	82.1	82.1	82.4
Males at age 65		14.7	15.8	16.2	16.4	16.8	17.1	17.2	17.4
Females at age 65		19.2	19.9	20.0	20.2	20.4	20.6	20.6	20.8

.. not available for a specific reference period

6. Low income cut-offs conveys the income level at which a family may be in straitened circumstances because it is likely to spend 20 percentage points more of its income than the average family of similar size on food, shelter and clothing.

7. The Gini coefficient measures the degree of inequality in income distribution. The Gini coefficient ranges from 0 (equal distribution of income across the population) to 1 (one person or household has all the income). The higher the Gini coefficient the more unequal the distribution of income is. A difference of .01 or more between two Gini coefficients is considered statistically significant.

Sources: Statistics Canada, CANSIM, tables 102-0506, 102-0511, 102-4005, 102-4505, 202-0701, 202-0705 and 202-0804.



Social indicators (continued)

	1981	1991	1997	1999	2000	2001	2002	2003	
Selected causes of death for men, per 100,000 males, ¹									
Cancer	239.0	247.5	230.7	228.9	225.3	223.8	220.5	215.3	
– Lung	73.2	78.8	69.9	70.3	64.3	64.6	64.5	62.7	
– Colorectal	29.2	25.1	23.5	24.1	24.0	22.8	24.1	23.0	
– Prostate	27.1	31.2	28.4	26.7	26.7	26.6	25.2	24.1	
Heart disease	380.1	263.7	231.8	220.8	202.9	189.7	183.1	178.9	
Cerebrovascular disease	81.1	55.8	52.4	47.3	46.4	44.6	43.7	41.6	
Selected causes of death for women, per 100,000 females ¹									
Cancer	148.8	153.7	149.1	149.4	149.4	147.6	149.3	148.1	
– Lung	17.9	29.5	32.3	34.8	34.4	34.4	35.3	35.4	
– Colorectal	21.6	16.8	15.2	15.2	15.1	14.9	15.2	14.6	
– Breast	30.1	30.1	27.4	25.2	25	24.9	24.4	24.1	
Heart disease	202.7	147.6	130.2	121.1	113.4	107.6	104.6	98.2	
Cerebrovascular disease	67.4	46.3	44.2	40	38.8	37.1	36.3	34.7	
	1997	1999	2000	2001	2002	2003	2004	2005	
Body Mass Index, BMI, ² male									
Underweight, BMI under 18.5	0.9	1.3	..	1.3	..	1.2	..	1.1	
Normal weight, BMI 18.5 to 24.9	41.2	39.6	..	43.8	..	41.2	..	40.5	
Overweight, BMI 25.0 to 29.9	43.6	44.1	..	39.0	..	41.0	..	40.9	
Obese, BMI 30.0 or higher	12.7	14.5	..	15.3	..	15.9	..	16.8	
Body Mass Index, BMI, ² female									
Underweight, BMI under 18.5	3.7	3.2	..	4.5	..	4.1	..	4.3	
Normal weight, BMI 18.5 to 24.9	55.3	54.4	..	53.0	..	52.1	..	51.8	
Overweight, BMI 25.0 to 29.9	25.2	26.3	..	25.9	..	25.7	..	26.1	
Obese, BMI 30.0 or higher	11.2	13.8	..	13.7	..	13.9	..	14.2	
	1981	1991	1999	2000	2001	2002	2003	2004	2005
Percentage of smokers									
Male	43.7	32.2	27.3	25.8	23.9	23.0	23.3	22.0	22.0
Female	32.2	29.7	23.3	23.1	19.6	20.0	18.5	17.0	16.0
Percentage of smokers by age groups									
15 to 19 years	43.4	22.6	27.7	25.3	22.5	22.0	18.3	18.4	18.0
20 to 24 years	48.6	39.7	35.4	32.3	32.1	31.0	30.5	27.8	26.0
25 to 44 years	42.1	35.8	29.9	29.6	25.0	24.0	25.4	24.8	23.4
45 to 64 years	37.4	30.1	21.9	20.6	19.7	17.4	17.3
65 years and over	18.9	16.0	11.8	13.4	10.8	7.3	6.7
	1981	1991	1997	1999	2000	2001	2002	2003	2005
Suicide rate per 100,000 population									
Male	21.3	21.6	19.6	21.7	18.4	18.6	18.4	18.5	
Female	6.8	5.3	5.1	5.6	5.2	5.2	5.0	5.4	

.. not available for specific reference period

1. Significant disruption of some mortality trends was caused by the implementation of ICD-10 as the Canadian mortality classification standard, effective in 2000. The impact of the implementation of ICD-10 on Canadian mortality trends is assessed in Health Statistics Division's ICD-9 and ICD-10 comparability study.

2. Body mass index, BMI, is calculated by dividing the respondent's body weight in kilograms, by their height in metres squared.

Sources: Statistics Canada, CANSIM, tables 102-0026, 102-0126, 103-0004, 105-4009, the 1981 data for percentage of smokers derived from Smoking Behaviour of Canadians supplements to the Labour Force Survey, 1991 data from General Social Survey, 1996 data National Population Health Survey and 1999 to 2003 data from Canadian Tobacco Use Monitoring Survey.



Social indicators (continued)

	1981	1991	1997	1999	2000	2001	2002	2003
Suicide rate per 100,000 population by age groups								
1 to 14 years	0.7	0.6	0.9	0.6	0.8	0.5	0.6	0.5
15 to 19 years	12.7	13.8	12.9	12.1	10.7	9.8	10.1	10.2
20 to 24 years	19.6	18.2	14.5	15.0	15.3	14.0	12.9	14.0
25 to 44 years	17.4	18.1	15.8	18.8	15.9	15.7	15.0	15.0
45 to 64 years	20.1	16.2	16.5	17.2	15.2	17.0	16.4	16.9
65 years and over	18.3	14.2	12.4	12.7	10.4	10.1	10.8	10.9

	1980	1990	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of offences											
Total, Criminal Code, excluding traffic	2,045,398	2,627,197	2,534,766	2,461,156	2,356,831	2,352,768	2,374,811	2,417,444	2,579,172	2,610,971	2,504,559
Total, crimes of violence	155,863	269,507	296,890	296,166	291,327	302,098	305,186	303,946	305,667	302,147	304,274
Homicide	592	660	586	558	538	546	553	582	549	624	658
Assault, levels 1 to 3	..	190,337	222,397	223,926	221,348	233,719	236,957	235,710	236,802	234,259	234,729
Robbery	24,581	28,109	29,587	28,963	28,740	27,037	27,284	26,662	28,437	27,495	28,669
Total, property crimes	1,334,619	1,554,348	1,459,536	1,377,901	1,299,981	1,252,387	1,241,936	1,246,481	1,305,229	1,269,999	1,206,142
Breaking and entering	349,694	379,364	373,316	350,774	318,054	293,357	279,461	275,573	284,925	275,869	259,521
Theft, motor vehicles	93,928	114,082	177,130	165,920	161,388	160,315	168,595	161,912	174,208	169,977	160,100
Total, drugs	74,196	60,645	66,593	70,921	80,142	88,091	89,395	92,781	86,791	97,630	92,255
Other Criminal Code ¹	554,916	803,342	778,340	787,089	765,523	798,283	827,689	867,017	968,276	1,038,825	994,143
Criminal Code, traffic ²	..	227,201	155,228	141,153	117,650	112,445	120,234	117,571	117,119	120,637	118,738

Rate per 100,000 population											
Total, Criminal Code, excluding traffic	8,343	9,484	8,475	8,161	7,752	7,666	7,655	7,706	8,144	8,165	7,761
Total, crimes of violence	636	973	993	982	958	984	984	969	965	945	943
Homicide	2.4	2.4	2.0	1.9	1.8	1.8	1.8	1.9	1.7	2.0	2.0
Assault, levels 1 to 3	..	687	744	743	728	762	764	751	748	733	727
Robbery	100	101	99	96	95	88	88	85	90	86	89
Total, property crimes	5,444	5,611	4,880	4,569	4,276	4,081	4,004	3,973	4,121	3,971	3,737
Breaking and entering	1,426	1,370	1,248	1,163	1,046	956	901	878	900	863	804
Theft, motor vehicles	383	412	592	550	531	522	543	516	550	531	496
Total, drugs	303	219	223	235	264	287	288	296	274	305	286
Other Criminal Code ¹	2,263	2,900	2,603	2,610	2,518	2,601	2,668	2,764	3,058	3,249	3,080
Criminal Code, traffic ²	..	820	519	468	387	366	388	375	370	377	368

.. not available for specific reference period

1. Other Criminal Code includes offences such as prostitution, gambling, possession of offensive weapon, missing court date, etc.

2. Criminal Code traffic includes offences such as dangerous operation of a vehicle, impaired driving, etc.

Source: Statistics Canada, CANSIM, table 252-0013, Suicide data from Health Statistics Division.

Social indicators (continued)

	1997	1998	1999	2000	2001	2002	2003
Adult prison court sentences							
Total offences							
Percentage sentenced cases resulting in prison term	43.2	44.3	43.4	42.9	42.1	41.5	41.3
Average length of sentence in months	4.3	4.6	4.3	4.2	4.1	3.8	3.8
Total Criminal Code							
Percentage sentenced cases resulting in prison term	43.1	44.2	43.4	43	42.3	41.7	41.3
Average length of sentence in months	4.1	4.3	4.2	4.1	4.0	3.8	3.7
Crimes against the person							
Percentage sentenced cases resulting in prison term	33.0	33.5	32.5	32.1	31.5	30.6	30.0
Average length of sentence in months	7.3	7.8	7.6	7.5	7.8	7.2	7.3
Homicide							
Percentage sentenced cases resulting in prison term	76.8	82.9	86.4	85.5	87.1	90.8	83.3
Average length of sentence in months	124.7	114.2	122.1	136.1	130	145.5	135.3
Crimes against property							
Percentage sentenced cases resulting in prison term	40.3	42.3	41.3	40.4	40.5	40.5	40.2
Average length of sentence in months	4.6	4.7	4.5	4.4	3.9	3.8	3.7
Criminal Code traffic							
Percentage sentenced cases resulting in prison term	52.4	55.7	54.8	54.1	52.7	52	51.4
Average length of sentence in months	2.2	2.6	2.5	2.5	2.6	2.5	2.5

	1976	1981	1989	1997	2000	2001	2002	2003	2004	2005
Economy										
Important rates										
Prime lending rate	10.0	19.3	13.3	5.0	7.3	5.8	4.2	4.7	4.0	4.4
Conventional 5-year mortgage rate	11.8	18.4	12.1	7.1	8.4	7.4	7.0	6.4	6.2	6.0
Exchange rate, in U.S. dollars	0.986	1.199	1.184	1.385	1.485	1.549	1.57	1.401	1.301	1.211
Personal savings rate ¹	13.7	17.4	13.0	4.9	4.7	5.2	3.4	2.4	1.4	-0.2
Real Gross Domestic Product, expenditure-based; chained 1997 dollars at market prices										
Billion dollars	508	600	764	883	1,021	1,039	1,071	1,092	1,124	1,157
Annual percentage change	5.2	3.5	2.6	4.2	5.2	1.8	3.1	2.0	2.9	2.9
Per capita, in thousand dollars	21.7	24.2	28	29.5	33.3	33.5	34.1	34.5	35.2	35.9

1. Ratio of personal savings to personal disposable income (persons and unincorporated businesses).
Source: Statistics Canada, CANSIM, tables 176-0043, 176-0064, 380-0002 and 380-0004.



Social indicators (continued)

	1976	1981	1989	1997	2000	2001	2002	2003	2004	2005
Consumers										
Consumer spending ² , annual percentage change	5.1	1.2	3.4	4.6	4.0	2.3	3.7	3.1	3.4	4.0
Consumer spending ² per capita, in thousand dollars	13.2	13.9	16.1	17.1	18.5	18.7	19.1	19.6	20.0	20.6
Consumer Price Index, all items, 1992=100	37.1	58.9	89.0	107.6	113.5	116.4	119.0	122.3	124.6	127.3
Annual percentage change in all items Consumer Price Index	7.5	12.4	5.0	1.6	2.7	2.6	2.2	2.8	1.9	2.2
Total consumer bankruptcies	10.0	23.0	29.2	85.3	75.1	79.5	78.2	84.3	84.4	84.6
New housing starts, in thousands	..	178.2	215.2	148.2	152.9	163.1	205.3	219.5	232.7	224.3
New Housing Price Index, 1997=100	..	71.9	106.8	100.0	104.1	107.0	111.3	116.7	123.2	129.4
New motor vehicle sales, in units, 1997=100	90.7	83.6	104.2	100.0	111.5	112.2	121.7	114.2	110.6	114.5
Household borrowing ³ , in billion dollars	17.4	15.3	39.8	32.4	40.0	41.6	48.4	55.2	56.9	62.8
Annual percentage change in wages, salaries and supplementary labour income in Gross Domestic Product	15.7	15.3	7.8	5.7	8.4	4.5	4.0	4.2	4.2	5.4
Corporate finances										
Corporate ⁴ surplus, net lending, in billion dollars	-3.9	-22.9	-14.7	-5.9	11.1	31.3	47.1	57.5	72.9	80.6
Operating profit, in billion dollars	..	..	101.1	118.1	165.1	143.1	145.8	161.0	193.6	217
Ratio of profit margin ⁵	..	..	7.7	6.6	7.5	6.2	6.2	6.7	7.7	8.2
Ratio of return on equity ⁶	..	..	11.5	10.9	10.9	7.4	5.7	9.4	10.6	11.0
Government accounts										
Revenue, in billion dollars	74.8	142.9	271.3	388.1	468.7	467.4	471.7	493.8	521.8	558.8
Expenditures, in billion dollars	77.0	147.4	292.7	386.8	433.9	455.5	465.6	486.0	502.1	524.1
Surplus, in billion dollars	-2.1	-4.5	-21.4	1.3	34.8	11.9	6.0	7.8	19.6	34.6
	1976	1981	1989	1997	1999	2000	2001	2002	2003	2004
Net international investment position										
Billion dollars	-61.3	-135.7	-232.1	-290.2	-243.7	-208.8	-203.4	-206.9	-206.2	-181.1
Liabilities as a percentage of Real Gross Domestic Product	12.1	22.6	30.4	32.9	25.1	20.5	19.6	19.3	18.9	16.1
	1976	1981	1989	1997	2000	2001	2002	2003	2004	2005
Balance of international payments										
Current account, in billion dollars	-7.5	-15.0	-25.8	-11.4	29.3	25.1	21.1	18.4	28.8	30.2
	1976	1981	1989	1997	2000	2001	2002	2003	2004	2005
National net worth⁷, unadjusted										
Billion dollars				2,720	3,286	3,523	3,701	3,875	4,151	4,371
Per capita, in thousand dollars				90.9	107.0	113.4	117.9	122.3	129.8	135.3

.. not available for a specific reference period

2. Personal expenditure on consumer goods and services in chained 1997 dollars.

3. Persons and unincorporated businesses.

4. Corporations and government business enterprises.

5. Ratio of operating profit to operating revenue.

6. Ratio of profit before extraordinary gains to total equity.

7. The sum of non-financial assets minus net foreign debt.

Sources: Statistics Canada, CANSIM, tables 027-0007, 079-0001, 177-0001, 187-0002, 326-0002, 327-0005, 376-0005, 376-0037, 378-0002, 378-0008, 380-0002, 380-0005, 380-0007 and 380-0016.

Lesson plan

Suggestions for using *Canadian Social Trends* in the classroom

"When is junior moving out? Transitions from the parental home to independence" and "Junior comes back home: Trends and predictors of returning to the parental home"

Objective

- To define the process of transition to adulthood in today's society

Curriculum areas: social studies, family studies, life skills

Classroom instructions

1. Read the two articles "When is junior moving out?" (August 2006 on-line) and "Junior comes back home" (October 2006 on-line). Summarize the factors that contribute to leaving the parental home and those that contribute to returning. Identify any other factors that you think affect the timing of a young person's departure from home and/or their return home.
2. The two articles show that leaving home and becoming an independent adult is taking longer than it did 30 years ago. What are some of the effects of a "failure to launch" on the individual family? On society as a whole?
3. Sociologists and demographers have been talking about "delayed adulthood" for several decades. Generally speaking, "delayed adulthood" means that, compared to their parents, today's young people are waiting till they are older before starting a career, getting married, buying a home, having children, and so on. However, some researchers think that it is time to expand the definition of adulthood to include goals in addition to family formation. Discuss how to define an "adult" and identify the qualities you would associate with such a person. Given this new "adult", how would you now define the steps in the progression from adolescence to adulthood?
4. The government is worried about the economic impact of "delayed adulthood" and has set up a task force to find out why young people are taking longer to establish themselves in their own independent households. You have been asked to address the task force and present your ideas for solving the problem. What kinds of policies or programs would you propose to the government? How would you measure the impact of your program?

Using other resources

See Teacher Resources by Subject at www.statcan.ca/english/edu/teachers.htm

Educators

You may photocopy "Lesson plan" or any item or article in *Canadian Social Trends* for use in your classroom.

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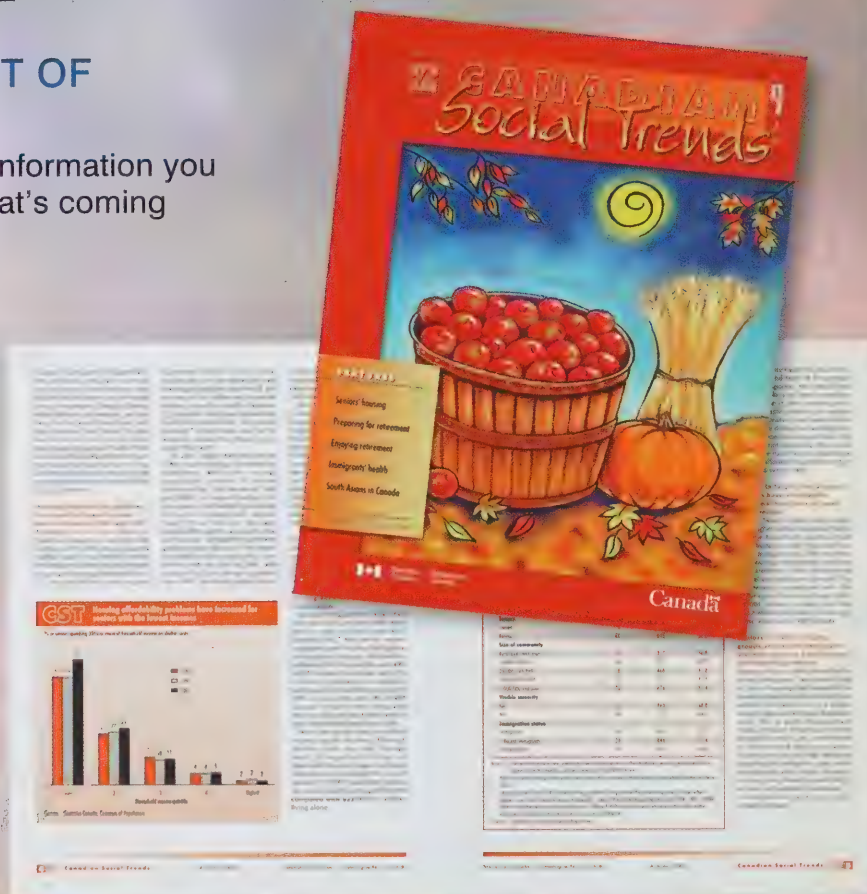
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on their first four years
in Canada

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CANADIAN Social Trends

Feature

2 Immigrants' perspectives on their first four years in Canada: Highlights from three waves of the Longitudinal Survey of Immigrants to Canada

by Grant Schellenberg and Hélène Maheux

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Immigrants' perspectives on their first four years in Canada:

Highlights from three waves of the Longitudinal Survey of Immigrants to Canada

by Grant Schellenberg and H       Maheux, Social and Aboriginal Statistics Division
Statistics Canada

Introduction

The experiences of immigrants during the settlement process can be examined from a number of different perspectives. Over the past 15 years, settlement in Canada has most often been examined in terms of immigrants' labour market and financial experiences. Among the topics investigated are the earnings trajectories of immigrants after arrival, the economic returns to their foreign credentials and experience, their ability to find employment in their area of specialization, and their incidence of low income.

Settlement has also been examined in terms of communities and social networks; for example, geographic patterns of settlement and the formation of 'immigrant neighbourhoods' have been the subject of research for over 30 years. More recently, the roles played by social networks and community-

based organizations have been a central focus.

In this report, we examine settlement in terms of the subjective assessments and perceptions of immigrants themselves. After having been in Canada for four years, what do immigrants like and dislike most about living here? What types of difficulties do they face? Do they still believe that coming to Canada was the right decision? Their views provide an important perspective on the settlement process and are a useful complement to existing studies.

The report is divided into three sections. In the first section, immigrants' perceptions regarding their first four years in Canada are examined. We consider aspects of Canadian life that they like and dislike, their reasons for remaining in Canada and their perceptions of their quality of life and material well-being.

In the second section, we examine the difficulties that immigrants face during their first four years in Canada. The section begins with an overview of the issue, followed by more detailed information on difficulties faced finding employment, accessing language training, finding housing and accessing health care.

In the third section, immigrants' assessment of their overall experience in Canada is considered, including the extent to which life in Canada has met their expectations, whether they believe coming here was the right decision and their citizenship intentions.

Overall, the report provides a broad overview of new immigrants' perceptions. Emphasis is placed on their responses to a broad range of questions rather than focusing on a single issue in great detail. Given the breadth of the report, differences in the perceptions of new immigrants

are examined across a limited set of characteristics, with particular emphasis on immigration admission categories.

Canada's immigration policy has been guided by three broad objectives: to reunite families, to fulfill the country's international obligations and humanitarian tradition with respect to refugees; and to foster a strong viable economy in all regions of Canada.

These objectives are reflected in the three main admission categories of immigration through which people are admitted to Canada as permanent residents: family class immigrants, refugees, and economic immigrants. People admitted through the economic category include principal applicants and accompanying spouses or dependants of skilled workers, business immigrants, provincial/territorial nominees and live-in caregivers.¹

Throughout this report, the perceptions and assessments of immigrants are shown separately for individuals in these three categories.

Methodology

The Longitudinal Survey of Immigrants to Canada (LSIC) was designed to study how newly arrived immigrants adjust over time to living in Canada. During the first LSIC interview, some 12,000 immigrants aged 15 and over were interviewed between April 2001 and March 2002, about six months after their arrival. During the second LSIC interview, about 9,300 of the same immigrants were interviewed again in 2003, approximately two years after their arrival, and in 2005, about 7,700 of the same immigrants were interviewed a third time, approximately four years after their arrival. We refer to these three interviews as Waves 1, 2 and 3 of the LSIC. The sample of approximately 7,700 immigrants that was tracked over all three waves of the LSIC is the focus of this study. This allows us to examine how the perceptions

<div>GST</div> <div>Table 1 Timing of interviews and reference periods for LSIC respondents</div>			
	Wave 1	Wave 2	Wave 3
Time since arrival in Canada	Approx 6 months	Approx 2 years	Approx 4 years
Reference period	Approx 0 to 6 months after arrival	Approx 7 to 24 months after arrival	Approx 25 to 48 months after arrival

and experiences of new immigrants changed over their first four years in Canada. The terms 'LSIC respondents' and 'new immigrants' are used interchangeably to refer to this group.

On some questions, LSIC respondents are asked about their views at the time of the interview – for example, if you had to make the decision again, would you come to Canada? On other questions, they are asked about their experiences during a specific period of time – for example, did they seek housing since their last interview? The reference periods for these questions are shown in Table 1.

It is important to note that the characteristics and experiences of the LSIC immigrant cohort may or may not be the same as those of immigrants who arrived in Canada at earlier or later points in time. For example, the downturn of the high-technology sector and the repercussions of September 11 were two events that may have had particular consequences for immigrants arriving in Canada in 2001-2002. Furthermore, the source countries from which immigrants arrive – particularly refugees – vary over time, introducing compositional differences between landing cohorts. In short, readers should note that we are examining the settlement experiences of a specific group of individuals. That being said, the successes and challenges faced by this group shed light on the process of immigrant settlement more broadly.

Newly arrived immigrants are a highly mobile population and relocating each of the initial LSIC

respondents two and four years after arrival posed a difficult challenge. To study immigrant perceptions and assessments of Canada, the loss of approximately 4,300 of the initial 12,000 respondents raises important questions: is sample bias introduced into the LSIC by the loss of some of the initial respondents? Were the initial LSIC respondents who were not relocated for a follow-up interview the ones who were most dissatisfied with life in Canada? If so, the perceptions of the LSIC respondents remaining after 4 years may be more optimistic than those of the sample initially interviewed six months after arrival.

To address this issue, the characteristics of Wave 1 respondents who were and were not relocated for a follow-up interview during Waves 2 and 3 of the survey were analyzed. Characteristics associated with not being relocated were identified and used to create a longitudinal weight that is applied to the data set. This makes some adjustment for bias that may be introduced by sample attrition.

In spite of this adjustment, it is prudent to be mindful of the loss of immigrants from the LSIC sample. All in all, the results of this study are representative of the immigrants who arrived in 2001-2002 and who were relocated over the four year course of the survey. The approximately 7,700 LSIC respondents who were relocated are representative of approximately 157,600 new immigrants, of whom 104,400 are economic immigrants, 42,600 are family class immigrants and 9,700 are refugees.²

Section one: Perspectives on life in Canada

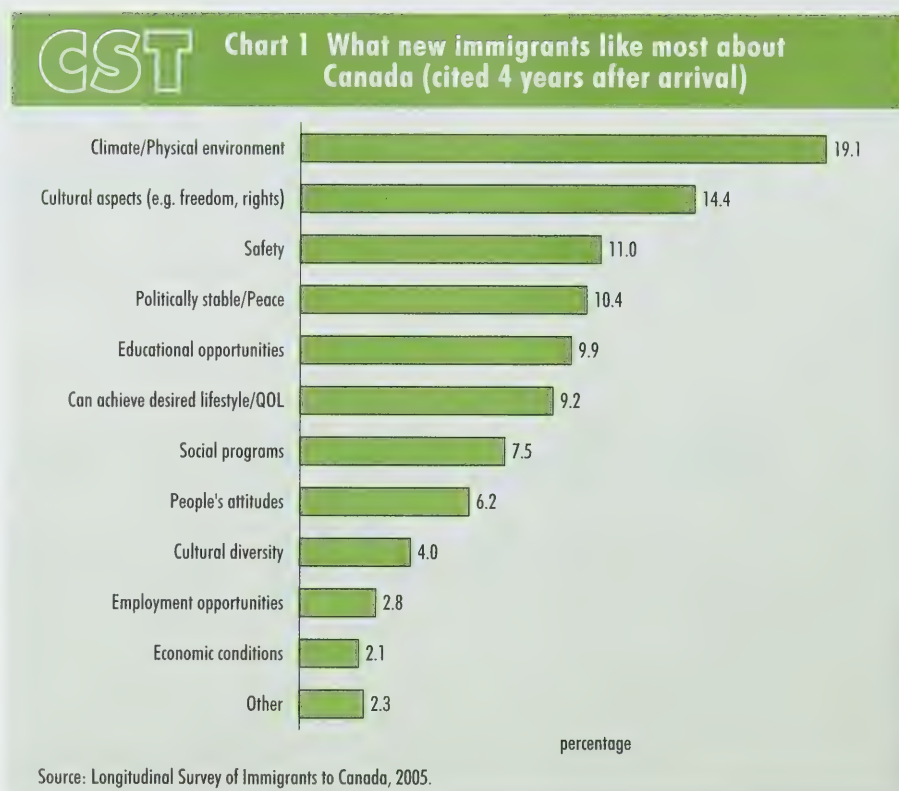
What new immigrants like and dislike about Canada

Four years after arriving in Canada, LSIC respondents were asked what they like and dislike most about living here.³ Freedom, rights, safety and security, and prospects for the future were among the things they like most, while lack of employment opportunities was one of the things they dislike most.

The largest share of immigrants (19%) said that the climate/physical environment in Canada was what they like most (Chart 1).⁴ This was the case for almost half (48%) of LSIC respondents living in Vancouver compared with 10% of those in Montréal and 14% of those in Toronto.

Many immigrants identified the social and political environment in Canada as what they like most about this country: 14% said they like cultural aspects such as rights and freedoms, 11% said they like the safety they experience, and 10% said it's the peace and political stability they like most. While these responses were cited by immigrants in all admission categories (Table 2), they were most prevalent among refugees. Refugees come to Canada to escape the dangers and hardships associated with war, political upheaval and social unrest and the social and political environment they find here likely stands in contrast to what they left behind.

Some new immigrants said that it is the opportunities in Canada they like most. For example, 10% said it's the educational opportunities for themselves or their family they like most, while 9% said it's the opportunity to achieve a desired lifestyle or quality of life. But while opportunities for education and lifestyle were cited by many, far fewer said they like the employment opportunities (3%) or economic conditions (2%) here. In this respect, new immigrants appear to be some-



what more positive about their prospects for the future in Canada than they are about their recent experiences in the labour market.

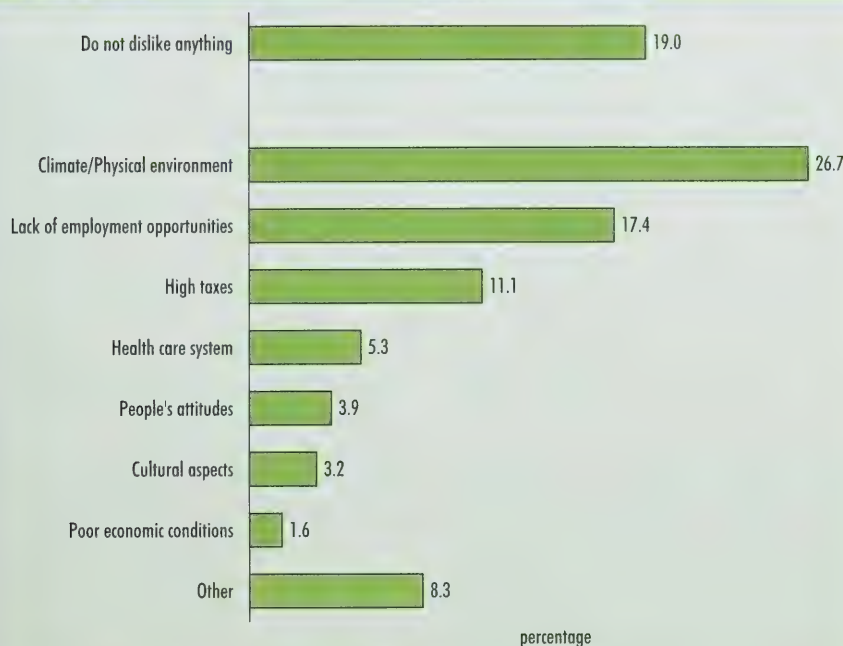
Immigrants were also asked what they dislike most about life in Canada after four years. The climate again featured prominently in this regard, with 27% of new immigrants saying this is what they disliked most (Chart 2).⁵ This was the case for 27 to 30% of those residing in Montréal and Toronto compared with 7% of those in Vancouver.⁶ The economic challenges facing immigrants were also evident, with 17% saying that it's the lack of employment opportunities and 11% saying it's high taxes they dislike most. Immigrants in the economic category were more likely than family class immigrants and refugees to cite these factors (Table 3). Finally, almost one-fifth of new immigrants (19%) said there isn't anything they dislike about Canada.

Overall, new immigrants value the social and political environment in

Canada, characterized by its rights, freedoms and security. While this was particularly the case for refugees, such reasons were also prevalent among immigrants in the economic and family categories. On the other hand, aside from the weather, it is the lack of employment opportunities that immigrants dislike most. These views were reflected in the reasons why immigrants remain in Canada.

Reasons for immigrating and for staying

During their interview 4 years after landing, LSIC respondents were asked about their plans to stay in Canada. Most (81%) said they plan to settle permanently in Canada, 5% said they plan to maintain residences here and elsewhere, 2% said they plan to live in Canada for some time and then return to their home country, and less than 1% said they plan to move to another country. Finally, 10% were uncertain of their plans.



Source: Longitudinal Survey of Immigrants to Canada, 2005.

Those individuals who said they plan to settle permanently in Canada or to maintain a residence here were asked about their reasons for staying. Many of the things that immigrants like most about Canada were reflected in their responses (Table 4). Considering all reasons cited, over half of these respondents (55%) said they plan to stay because of the 'quality of life' in Canada while 39% plan to stay because of the positive future for their family here.

Other responses testify to the importance of the social and political environment. For example, almost one-third (30%) said the peaceful nature of Canada was a factor in their decision to stay, with this reason cited by 54% of refugees. New immigrants also pointed to Canada's public institutions, with access to education and the social system (such as health care and other programs) mentioned by 23% and 18% respectively. Political and religious freedoms were another consideration in the decision to stay, cited by 16% of new immigrants.

Social and familial networks were also an important consideration, with 31% of LSIC respondents staying in Canada to remain close to family and friends. This reason was most prevalent among family class immigrants (59%).

Fewer new immigrants pointed to the importance of economic factors as a reason for staying: 16% cited job opportunities and 22% cited one or more employment-related reasons, including job opportunities, working conditions, salary or pay, and/or business climate/free market.

LSIC respondents were also asked to identify which of the reasons cited was the *most important* in their decision to stay in Canada (Table 4). What is striking is that almost 80% of respondents cited one of four reasons – quality of life (32%), the desire to be close to family and friends (20%), the future prospects for their family (18%) and the peaceful nature of the country (9%).

In many cases, the main reasons for planning to stay reflected the

unique circumstances of immigrants in different admission categories: 30% of refugees cited the peaceful nature of Canada as their *most important* reason for staying while 46% of family class immigrants cited the desire to remain close to family and friends. Five percent or less of immigrants in each admission category cited employment-related reasons.

Finally, the small proportion of immigrants who said they planned to leave Canada (3%) was asked about their reasons for doing so. The most frequently cited responses were the desire to be close to family and friends (37%) and the desire to return to their home country (25%). About one-third of those planning to leave (32%) cited employment-related reasons, including better job opportunities, pay, working conditions or business climate elsewhere.⁷

Quality of life and material well-being after arrival

It is interesting to note that while some new immigrants express dissatisfaction with their economic experiences in Canada, most provide positive assessments about the quality of life here. Further light can be shed on this using information that LSIC respondents provided during their second interview.

After having been in Canada for two years, LSIC respondents were asked if their level of material well-being (such as home, car and disposable income) is better, about the same or worse than it had been prior to coming here (Chart 3). Among economic immigrants, about one-third (35%) said their level of material well-being is better than it had been prior to arrival, about one-third said it's about the same (31%) and about one-third said it's worse (34%). In contrast, family class immigrants and refugees had more favourable assessments of their material well-being, with 58% and 69% respectively saying their situation in Canada (after two years) is better than it was before coming here.

The material well-being immigrants experienced before coming to Canada is shaped by many factors, such as the countries from which they came (e.g. Afghanistan, China or France), their socio-economic position in their source country (e.g. being at the bottom, middle or top of the income or occupational distribution), and the circumstances of their emigration (e.g. migrating via a refugee camp). In 2002, Afghanistan, Sri Lanka and Pakistan were the top three source countries for refugees arriving in Canada and Gross Domestic Product per capita was below \$3,600 in each of those countries compared with \$29,865 in Canada.⁸ India, the People's Republic of China and the United States were the top three source countries for family class immigrants, while the People's Republic of China, India and Pakistan were the top three source countries for economic immigrants, specifically, principal applicants in the skilled worker category.⁹

LSIC respondents were also asked about the quality of life in

Canada (such as safety, freedom and pollution) compared with their situation before coming here. Responses to this question were more positive than those regarding material well-being. Indeed, 84% to 92% of immigrants in each admission category said that their quality of life is better in Canada than it was prior to coming here. Among economic immigrants, 84% said their quality of life is better here, although only 35% said their material well-being is better. The same pattern is evident among family class immigrants and refugees, although the difference between these two measures is smaller in magnitude.

Immigrants' assessments underscore the benefits associated with rights and freedoms, safety and security, and political stability. These social benefits are enjoyed by all members of society and they are available to new immigrants immediately upon their arrival in Canada – as reflected in their responses after two years. In contrast,

material well-being is shaped to a great extent by labour market participation and its outcomes and in this respect is more 'individual' in nature. Given that it takes new immigrants time to get established in the workforce, improvements in their material well-being may take more time as well. A key question is how long it takes new immigrants to get established in the labour force and how quickly their material well-being improves.

Quality of life and material well-being after being in Canada four years

Labour market research shows that in the years immediately after arrival in Canada, immigrants have earnings below those of similar Canadian-born workers, but that over time this earnings gap is reduced (Frenette and Morissette, 2003). Given this general pattern, how do immigrants perceive the gains they make in their material well-being once they're in Canada?

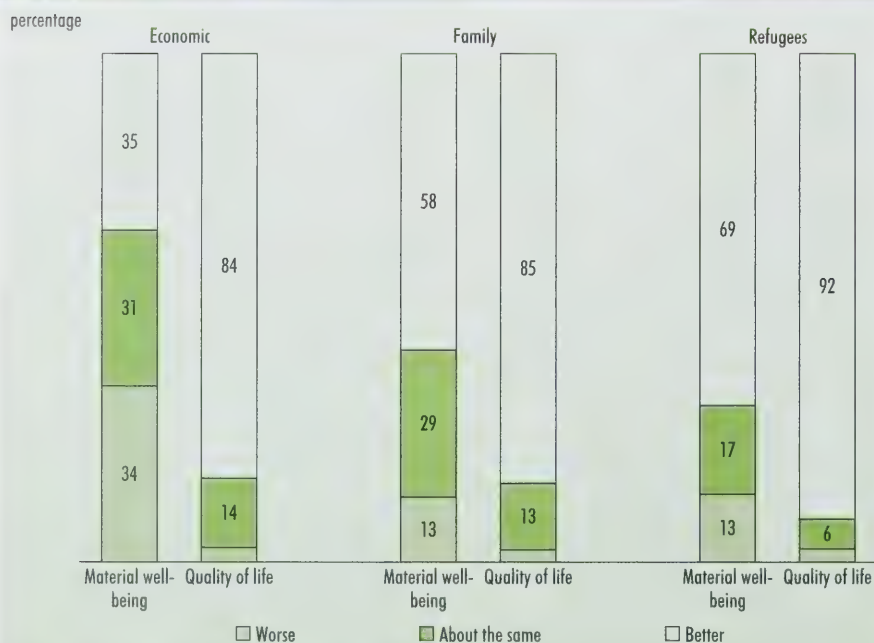
Four years after arriving in Canada, LSIC respondents were asked if their material well-being was better than, the same as, or worse than it had been two years earlier (i.e. two years after arrival). In short, how had things changed over the course of their third and fourth year here?

Just over one-half of new immigrants in each admission category reported that their level of material well-being was better in year four than it was in year two (Table 5). Information is not available regarding the magnitude of this improvement. Conversely, 5% to 6% of immigrants in each category said their material well-being was worse. Between these extremes, 37% of economic immigrants, 39% of refugees and 44% of family class immigrants said their material well-being was about the same in year 4 as it had been in year 2.

LSIC respondents were not directly asked about how they felt about the gains they had or had not made over this period. However, as will be shown in Section 3, immigrants who said

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Chart 3 Material well-being and quality of life after two years in Canada compared to situation prior to coming here



Source: Longitudinal Survey of Immigrants to Canada, 2005.

their material well-being 'remained about the same' or worsened were more likely than others to say that life in Canada has fallen short of their expectations. This suggests that they had expected to make material gains during this period and were disappointed that their situation had remained 'about the same'. We will return to this point in Section 3.

LSIC respondents were also asked if their 'quality of life' 4 years after arrival was better than, about the same as, or worse than it had been 2 years after arrival. About one-half of new immigrants said their quality of life remained about the same over this period, while 44% said it improved (Table 5). Perceived changes in quality of life were also associated with whether or not immigrants felt that life in Canada had fallen short of their expectations.

Summing up

During the 1990s and early 2000, a considerable number of studies documented the difficulties that new immigrants face in the Canadian labour market. These difficulties are evident in the subjective assessments provided by new immigrants themselves. For example, a considerable share said it's the lack of employment opportunities they dislike most about Canada.

Nonetheless, immigrants in all admissions categories have very positive assessments of the quality of life here. Safety and security, rights and freedoms, and opportunities for themselves and their families are some of the things they like most. This underscores the value they place on the social and political environment in Canada and the importance of this to their sense of well-being.

Section two: Difficulties encountered

We now turn to the difficulties new immigrants encounter during the first four years of settlement in Canada. We start by examining their overall assessments of the difficulties faced, followed by difficulties in

specific areas, including finding suitable employment, accessing language training, finding housing and accessing health care.

An overview of difficulties encountered

Four years after arrival, new immigrants were asked about the difficulties they had encountered in Canada, and to identify which of these difficulties was the most serious. Chart 4 provides an overview of their responses, while Table 6 shows the responses of immigrants in each admission category.

Finding an adequate job¹⁰ was the most often cited difficulty, mentioned by almost half of new immigrants (46%). Economic immigrants were most likely to cite employment difficulties (54%), followed by refugees (35%) and family class immigrants (29%).

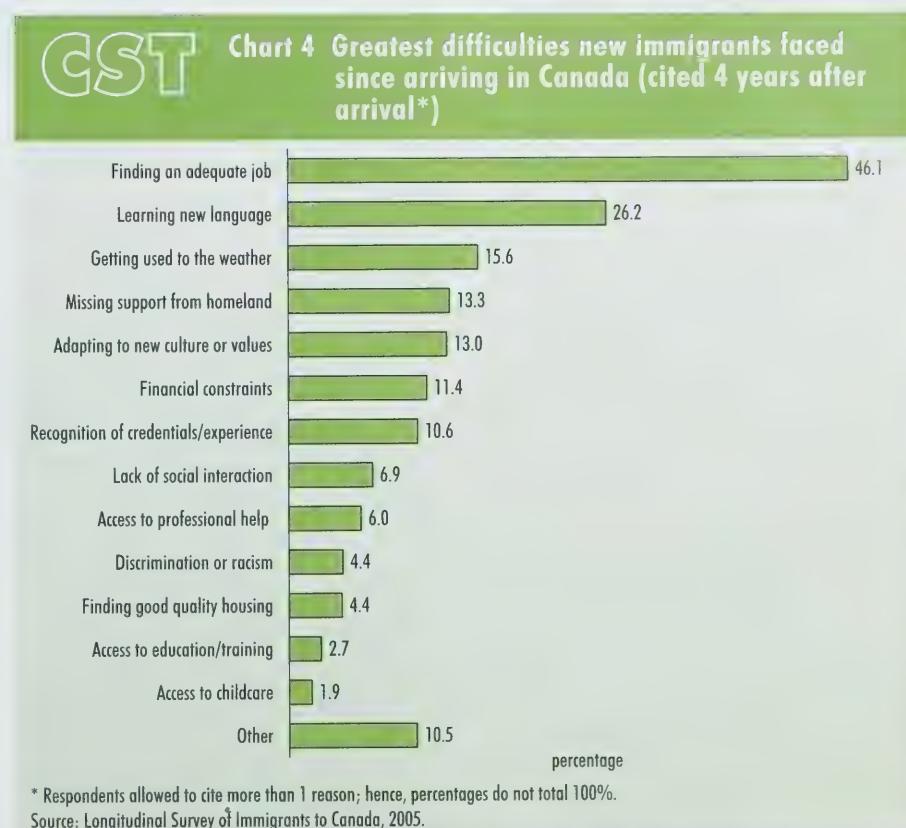
Linguistic and cultural adaptations were a challenge for many. About one-quarter of new immigrants (26%) said that learning a new language was a

difficulty while 13% mentioned the challenge of adapting to new cultures and values. Linguistic challenges were most prevalent among refugees (41%), although they were also cited by many economic immigrants (23%).

Canadian weather again loomed large, with 16% of new immigrants stating that adjusting to the climate was the greatest challenge they faced.

Social supports and interactions were another challenge for new immigrants, with 13% citing the absence of support from their home country as a difficulty and 7% citing the lack of social interactions/new friends in Canada.

Just over 10% of immigrants cited financial constraints and the recognition of credentials and experiences as difficulties faced since arrival. As will be documented below, many job seekers identified foreign credential recognition as a problem when they were asked about specific difficulties they faced in the labour market.



When asked which of these difficulties was the most important, the largest shares of new immigrants cited the challenge of finding employment and of learning English or French. Together, these two responses were cited by 44% to 59% of immigrants in each admission category (Table 6). Almost half (45%) of economic immigrants said finding employment was the most important difficulty they faced, while this was the case for 22% and 26% of family class immigrants and refugees respectively. Almost one-third (30%) of refugees said learning a new language was their greatest challenge, while this was the case for 14% and 22% of economic and family class immigrants respectively.

Given the extent to which employment and language are challenges faced by new immigrants, we now examine these areas in more detail.

Challenges in the labour market

Over the past 15 years, many studies have documented the deteriorating labour market and financial characteristics of recent immigrants. In the initial years after arriving in Canada immigrants have long had earnings below those of their Canadian-born counterparts, with the size of this 'earnings gap' narrowing as time passes. However, through the 1980s and 1990s the size of the initial earnings gap increased considerably, raising questions about whether the earnings of immigrants would ever catch up to those of their Canadian-born counterparts (Frenette and Morissette, 2003). Furthermore, since the early 1980s the share of recent immigrants in low-income increased markedly, in spite of rising levels of educational attainment among this group (Heisz and McLeod, 2004; Picot, Hou and Coulombe, 2007).

The types of obstacles immigrants experience when seeking employment

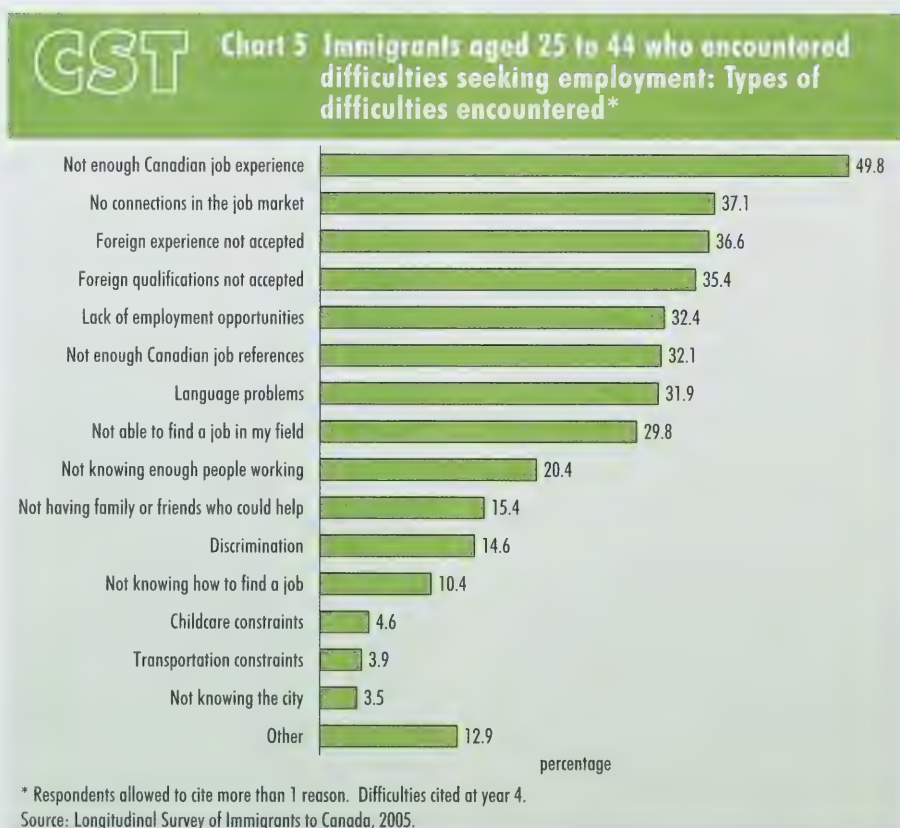
The perspectives and assessments of new immigrants seeking employment provide insights on the challenges and obstacles they face in the labour market. Our discussion is limited to LSIC respondents who were aged 25 to 44 upon their arrival in Canada. Immigrants aged 15 to 24 and aged 45 or older were excluded to remove the effects of students, late labour market entrants and retirees from the analysis. Furthermore, information regarding job search activities is not strictly comparable across all three waves of the LSIC so caution must be exercised when comparing results from Wave 1 with those from Waves 2 and 3.

During the period between 7 and 24 months after arrival, 62% of all new immigrants aged 25 to 44 looked for a job; during the period between 25 to 48 months after arrival 53% did so. The majority of job seekers reported that they experienced a

problem or difficulty when searching for employment (Table 7). They were asked to identify all of the problems or difficulties they encountered, as well as the one they consider to be the most serious.

Considering all difficulties cited at Wave 3, lack of Canadian work experience was mentioned most often (50%), followed by lack of contacts in the job market (37%) and lack of recognition of foreign experience (37%) and foreign qualification (35%). About one-third of job seekers who experienced difficulties (32%) cited language barriers as a problem (Table 8). The prevalence of other problems is shown in Chart 5.

Considering the most serious difficulties cited at Wave 3, LSIC respondents pointed to a number of important issues. First, work experience is central. Of the job seekers who encountered a problem, 19% said their most serious difficulty was their lack of Canadian job experience (reported during Wave 3) and another 9% cited the lack of



recognition of their foreign work experience (Table 9). There is likely a well-worn 'catch-22' here as new immigrants need appropriate Canadian work experience to find a suitable job, but encounter difficulties finding a job to gain this experience.

Second, language barriers are another challenge. Of the job seekers who encountered a problem, about one-in-six (16%) cited language problems as their most serious difficulty. The 2001 Census shows that 18% of immigrants who arrived in Canada between 1996 and 2001 spoke English or French as their mother tongue, while this was the case for 40% of immigrants who arrived during the 1970s.¹¹ Given this trend, language barriers are likely to be an increasingly prevalent challenge for immigrants in the labour market.

Third, lack of acceptance of foreign qualifications was cited as the most serious challenge faced by 12% of job seekers.

Fourth, job seekers also underscored the importance of contacts and networks in the job market. Of the job seekers who encountered a problem, 9% said their most serious difficulty was their lack of connections in the job market, 3% cited a lack of Canadian job references and 1% cited not knowing enough people working. This suggests that 'social capital' – the networks and contacts an individual can draw upon – as well as 'human capital' – the qualifications, experience and skills that individuals offer – are both ingredients for labour market success.

Finally, job seekers pointed to a lack of employment opportunities as the most serious challenge they face. Almost 12% cited a general 'lack of employment opportunities' and another 7% mentioned the challenge of finding a job in their field.

All in all, these responses suggest that the challenges new immigrants face in the labour market are multifaceted.

Multiple barriers to employment

In many cases, new immigrants experience multiple difficulties when seeking employment. To document this, we limit our analysis to four potential problems: 1) lack of work experience 2) language problems 3) lack of foreign credential recognition and 4) lack of job contacts or networks. Eight of the responses listed in Chart 5 were used to construct these groups.¹² Table 10 includes job seekers aged 25 to 44 who encountered any problems when looking for work, and shows the proportion who encountered none, one, two, three or four of these four problems under consideration.

Overall, the majority of these job seekers reported multiple difficulties. Considering the period 25 to 48 months after arrival, 30% of these job seekers encountered two of the four problems and 26% encountered three or all four of them. In short, lack of work experience, language problems, lack of foreign credential recognition and lack of job contacts are often 'overlapping' problems facing immigrant job seekers. For example, almost two-third of job seekers who reported a language problem also reported that work experience was a difficulty. Considering the remainder of Table 10, 29% of job seekers encountered only one of these four problems, and 15% did not encounter any of them.

Accessing language training¹³

Many new immigrants say that learning a new language is a challenge they face in Canada. In this context, difficulties encountered *en route* to language training are an important consideration.

During their second and third interviews (two and four years after arrival), LSIC respondents of all ages were asked if they had taken any language training or had looked for information about language courses during the preceding 18 to 24 months.

Comparable information was not collected during the first interview 6 months after arrival.

Between 7 and 24 months after arriving in Canada, 26% of new immigrants took at least one language course and another 12% looked for information regarding language training (Table 11). Refugees were more likely to have taken a course (49%) than immigrants in the economic class (25%) or the family class (23%). This is consistent with the fact that refugees were most likely to say that language barriers pose a difficulty for them. During years three and four, 10% of new immigrants had taken language training and 9% had looked for language training information. Again, participation was most prevalent among refugees.

LSIC respondents who had taken language training or had sought information regarding language training were asked about problems they had encountered in this area. Between 25 and 48 months after arrival, about 20% of new immigrants who had taken a language course experienced a problem, while 42% of new immigrants who sought information regarding training (but did not take a course) did so (Table 12).

Time constraints and financial constraints were among the most serious problems encountered by new immigrants en route to language training (Table 13). In this respect, their experiences are much like those of Canadians in general. Statistics Canada's 2003 Adult Education and Training Survey shows that financial and time constraints are the barriers to training most frequently cited by Canadians with unmet training wants and needs (Peters, 2004). Again, such constraints are prevalent among new immigrants seeking language training. The availability of language courses was also near the top of the list, cited as the most serious difficulty by 14% of new immigrants who encountered a problem en route to language training.

Finding housing

Finding housing is a key task for new immigrants, particularly those who are not joining family members already here. During their first six months in Canada, about three-quarters of new immigrants (77%) looked for housing, while during their third and fourth years in Canada, 43% of new immigrants did so (Table 14). The declining proportion seeking housing over this period suggests that many had gotten 'settled in' and were no longer in the housing market. Nonetheless, the fact that 43% of new immigrants had looked for housing during a two year period underscores the residential mobility of this group, especially considering that about 13% of all Canadians change residences in a given year.

Turning to difficulties encountered, the share of 'housing seekers' experiencing a problem declined from 38% during the first six months to 18% during years 3 and 4. Considering all immigrants (whether or not they sought housing), the shares experiencing a difficulty declined from 29% to 8% over these periods. This was attributable to both a decline in the share of immigrants looking for housing and a decline in the share of those looking who experienced a problem.

Across immigrant categories, refugees were most likely to experience difficulties finding housing while family class immigrants were least likely. Chart 6 shows these shares over the first four years in Canada.

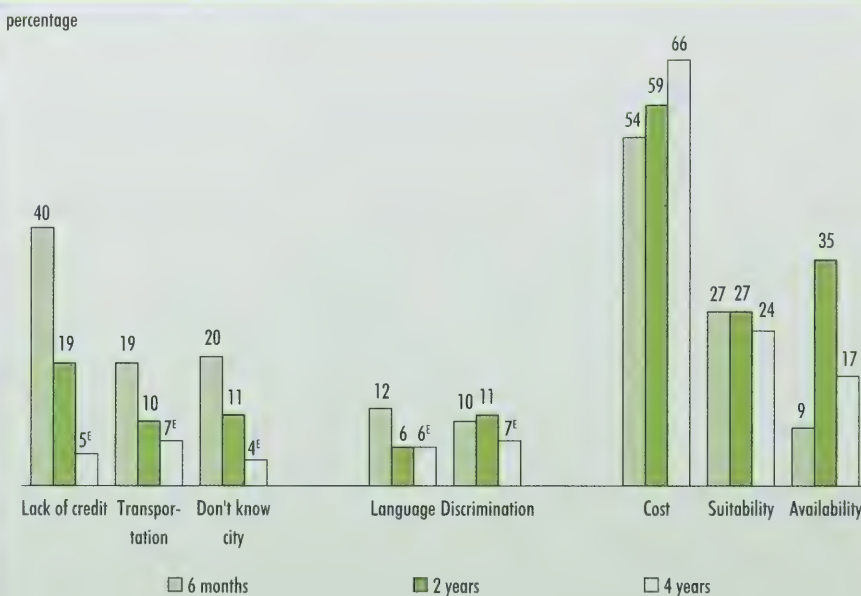
The types of problems new immigrants encountered when trying to find housing changed over their first four years in Canada. During the first six months, lack of credit, poor knowledge of their city, and lack of transportation were among the problems encountered (Chart 7). However, these problems were far less prevalent two years and four years after landing. One explanation is that over time immigrants were able to establish credit records, learn about their city, and obtain their driver's license or become familiar with public

GST Chart 6 Percent of new immigrants who encountered difficulties finding housing, by time since arrival in Canada



Source: Longitudinal Survey of Immigrants to Canada, 2005.

GST Chart 7 New immigrants who encountered difficulties finding housing: Types of difficulties encountered*, by time since arrival in Canada



* Respondents allowed to cite more than 1 reason; hence, percentages do not total 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

transportation thereby making these factors less problematic when seeking housing.

Conversely, the difficulties associated with housing costs were more consistently evident over time. Six months after arrival, about half of the housing seekers who had experienced a difficulty (54%) said housing costs were a problem and this still topped the list four years later. Likewise, the suitability of accommodation remained a challenge, likely reflecting the large size of immigrant households and the limited availability of larger units on the market.

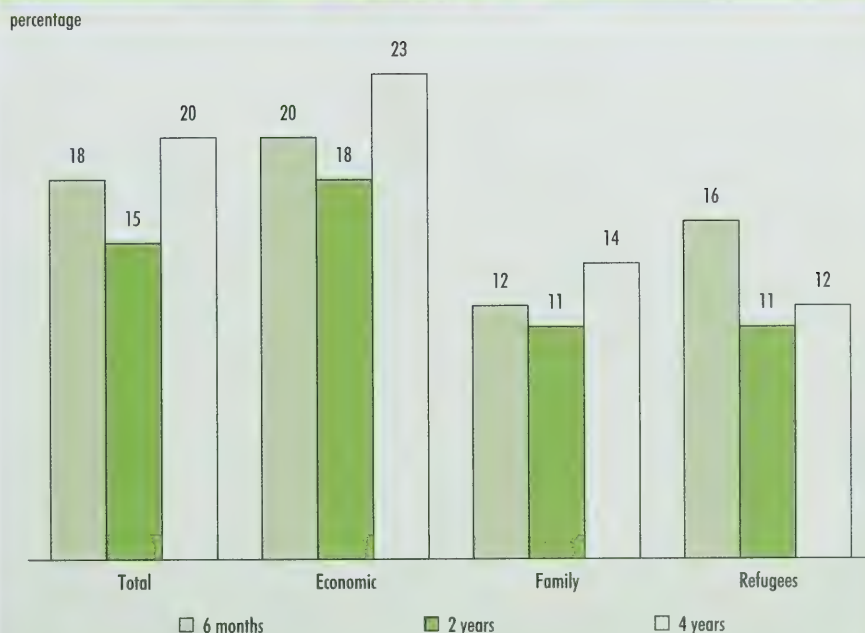
Over time, the difficulties new immigrants encounter when seeking housing come to reflect the challenges facing Canadians in general. For example, affordability and suitability are two of the criteria Canada Mortgage and Housing Corporation (CMHC) uses to define 'core housing need'. CMHC reports that affordability is the primary obstacle that Canadians encounter when seeking accommodation (CMHC, 2006).

Accessing health care

LSIC respondents were asked if they had experienced any problems or difficulties getting access to or using health services in Canada. At six months, two years and four years after arrival, about 15 to 20% of new immigrants say they encountered such problems or difficulties. Economic immigrants were more likely than family class immigrants and refugees to mention such difficulties (Chart 8).

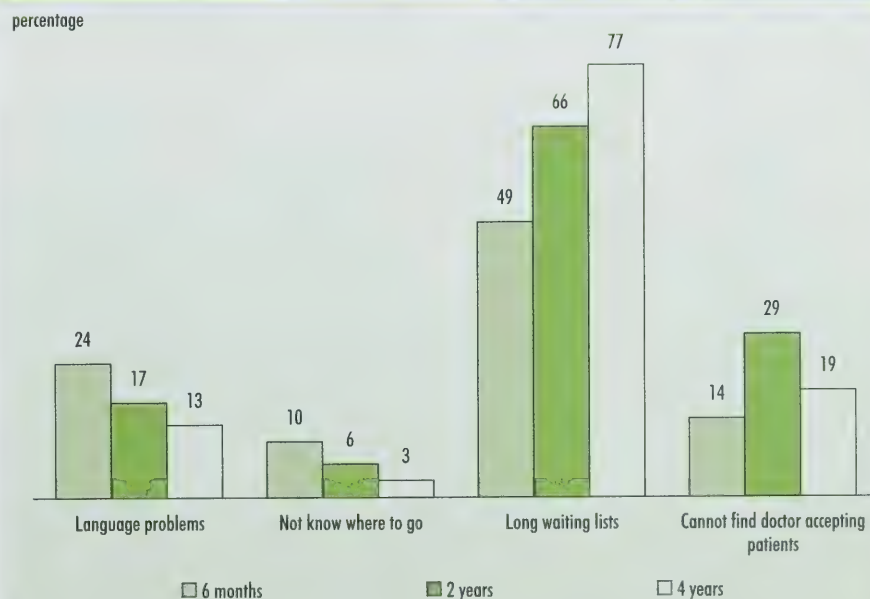
Turning to the types of difficulties encountered, we again see that some problems are transitory in nature (Chart 9). For example, the share of immigrants citing language problems as an obstacle to health care declines from 24% six months after arrival to 13% four years after arrival. Similarly, the share of immigrants saying they did not know where to go for health care declined over this period.

GST Chart 8 Percent of new immigrants who encountered difficulties accessing health care, by time since arrival in Canada



Source: Longitudinal Survey of Immigrants to Canada, 2005.

GST Chart 9 New immigrants who encountered difficulties accessing health care: Types of difficulties encountered*, by time since arrival in Canada



* Respondents allowed to cite more than 1 reason; hence, percentages do not total 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Conversely, among the individuals who encountered a difficulty accessing health care, long waiting lists are increasingly prevalent – cited by one-half of individuals who had encountered a problem six months after arrival and by three-quarters of individuals who had encountered a problem four years after arrival. Finding a doctor accepting new patients is also a frequently cited problem.

Again, these problems are not unlike those facing Canadians more generally. As Statistics Canada's *Access to health care services in Canada* series shows, "...waiting for care remains the number one barrier for those [individuals] having difficulties accessing care" (Berthelot and Sanmartin, 2005).

Summing Up

When asked a general question about the challenges they face in Canada, the largest share of new immigrants say that it's finding a job that is most difficult. The detailed information provided by job seekers indicates that there are a number of factors at play here – including credential recognition, lack of Canadian work experience, language barriers and lack of social networks. Typically, these are not obstacles faced by job seekers born and raised in Canada and in this respect new immigrants face a unique set of challenges.

In other domains, such as accessing language training, finding housing and accessing health care, there are some obstacles that are unique to new immigrants. Lack of credit history, knowledge of the local area, language barriers and transportation constraints are challenges faced by some individuals, particularly during the initial stages of settlement.

In other cases, the challenges facing new immigrants are much like those facing Canadians more generally. In the area of training, time constraints and financial constraints are frequently cited challenges; in the area of health care, waiting times are a top priority; and in the area of

housing, affordability remains a key consideration.

Section three: Assessment of life in Canada

Overall, new immigrants experience highs and lows during their first four years in Canada. Their assessments of the quality of life here testify to the positive aspects of settlement, while the difficulties they encounter testify to the many challenges. On balance then, how does life in Canada measure up to their expectations? Do immigrants feel they made the right choice in coming here?

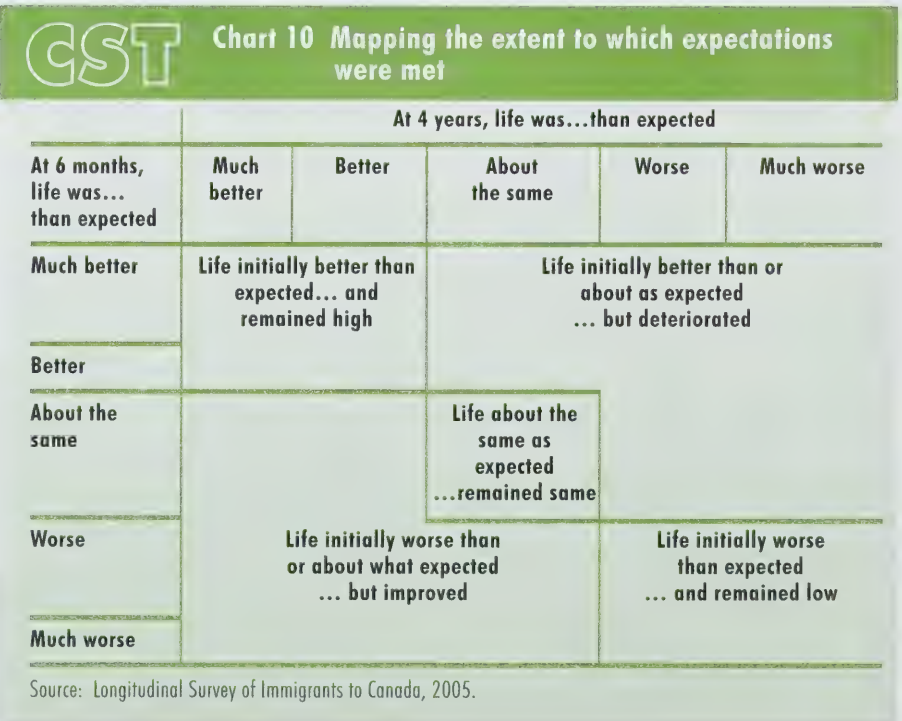
Extent to which expectations about life in Canada were met

Immigrants come to Canada with expectations – whether realistic or not – about what life will be like here. To what extent are these expectations being met? To address this, LSIC respondents were asked whether life in Canada is better than they had expected, about what they had expected, or worse than they had expected. By comparing their

responses at 6 months and 4 years after arrival, some insights regarding their experiences can be gained.¹⁴

The possible responses to these expectation questions are shown in Chart 10. In the top left hand corner of the matrix are individuals who, six months after arrival, said that life in Canada was 'much better' or 'better' than they had expected and who still felt the same way after four years. In short, their expectations of life in Canada have consistently been exceeded. Along the downward diagonal to the right are individuals who, at six months and four years after arrival, said that life in Canada was about what they expected it would be. And in the bottom right corner are individuals who said, at six months and four years, that life in Canada had fallen short of their expectations.

Two additional groups are identified in the matrix. At the bottom left are individuals who, at six months, said that life in Canada was worse than or about what they had expected, but who had a more positive assessment



after four years. In other words, their assessment of life in Canada improved over the four year period. And at the top right are individuals who, at six months, said that life was better than or about what they had expected, but who had a more negative assessment after four years. In short, their assessment of life in Canada deteriorated.

The distribution of new immigrants across these five categories is shown in Table 15. Several points can be made. First, about two-thirds of new immigrants reported a fairly positive congruence between their expectations of life in Canada and their experiences here. More specifically, 21% of them said their expectations of life in Canada have consistently been exceeded, and another 16% said their expectations have consistently been met. In addition, another 29% reported that life in Canada was initially worse than or about what they had expected, but that their situation improved over time. In this respect, their assessment was positive. Combining these three groups, the expectations of two-thirds of new immigrants have been exceeded, met or improved upon.

Conversely, there is a low or declining degree of congruence between the expectations and experiences of about one-third of new immigrants. More specifically, 11% reported that life in Canada has consistently fallen short of their expectations, and 23% reported that life in Canada was initially better than or about what they had expected, but this assessment deteriorated over time (Table 15).

Second, there are noticeable differences in the congruence between expectations and experiences reported by immigrants in the different admission categories. More specifically, 15% of economic immigrants reported that their expectations have consistently been exceeded, while this was the case for about 33% of family class immigrants and refugees. Conversely, economic immigrants were more

likely than others to feel that their expectations have not been met. One possible explanation is that economic immigrants had higher expectations than others regarding their employment prospects in Canada but have experienced difficulty realizing these. On a positive note, economic immigrants were more likely than others to say that although their life in Canada initially fell short of their expectations, things have improved since (31%).

In Section one, immigrants' assessments of the changes in their material well-being and quality of life were documented. These assessments are correlated with whether or not they feel their expectations of life in Canada have been met (Chart 11). Of the immigrants who said their material well-being improved between year 2 and year 4 (i.e. it was 'better'), 73% said their expectations of life in Canada have been exceeded, met or improved upon.¹⁵ In contrast,

immigrants who said their level of material well-being stayed the same or worsened were less likely to have a positive assessment in this respect. This pattern is evident among immigrants in all categories.

Most believe that coming to Canada was the right decision

During each of the three LSIC interviews, respondents were asked, "If you had to make the decision again, would you come to Canada?" Overall, 72% of new immigrants said 'yes' to this question each of the three times they were asked it. Another 12% said 'no' or expressed uncertainty during at least one of the first two interviews, but by the third interview felt they had made the right decision in coming here (Chart 12). Altogether, 84% of immigrants were positive about their decision to come to Canada after being here four years. This figure was 80% among economic immigrants and over 90% among refugees.

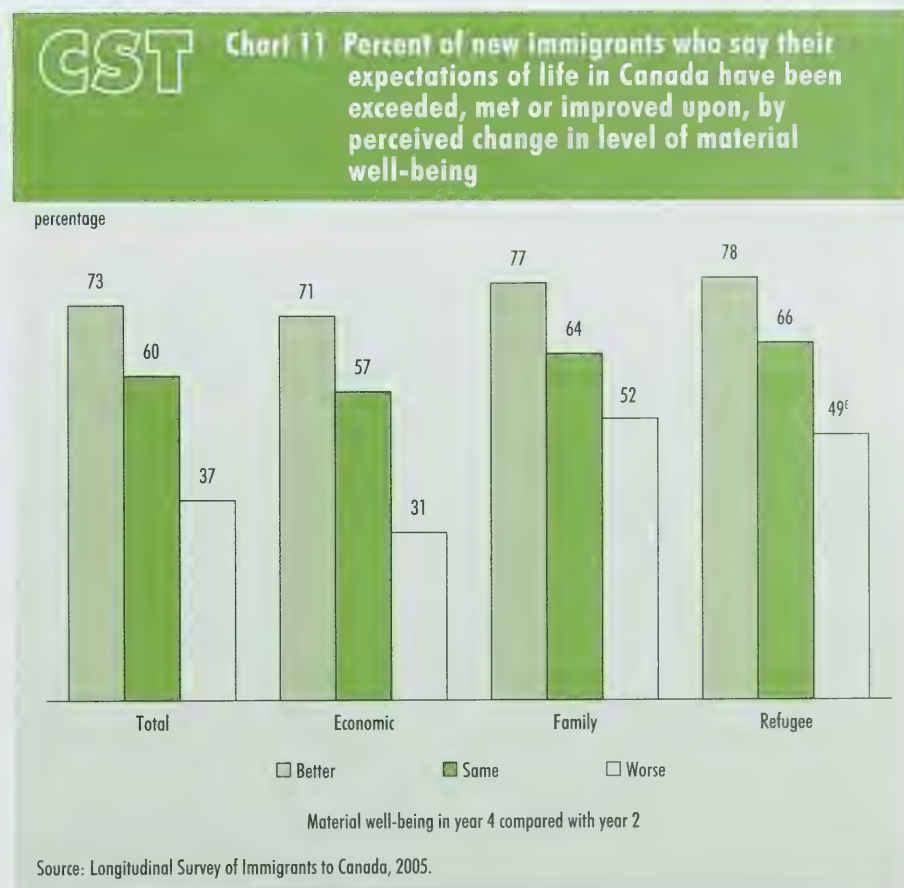
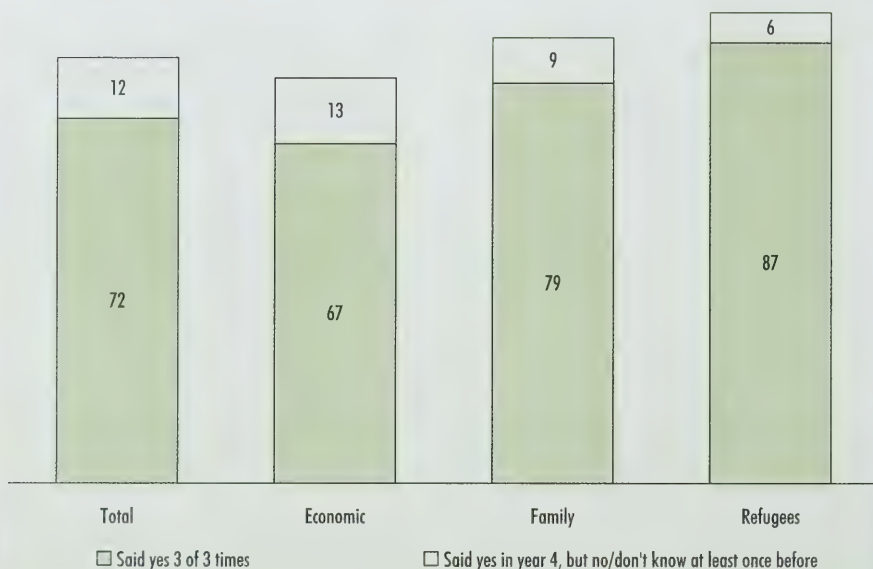


Chart 12 New immigrants' perspectives on whether they would make the same decision to come to Canada again

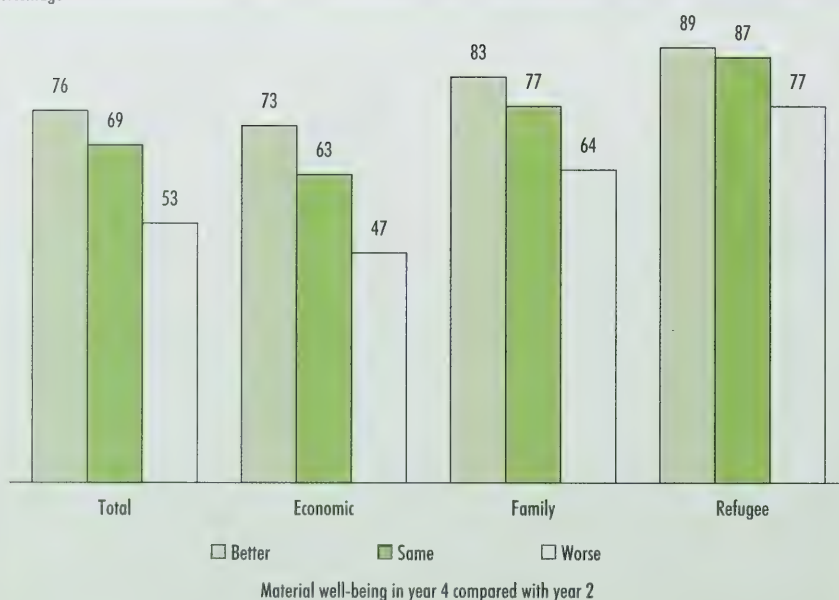
percentage



Source: Longitudinal Survey of Immigrants to Canada, 2005.

Chart 13 Percent of new immigrants who consistently say they would make same decision to come to Canada, by perceived change in material well-being between year 2 and year 4

percentage



Source: Longitudinal Survey of Immigrants to Canada, 2005.

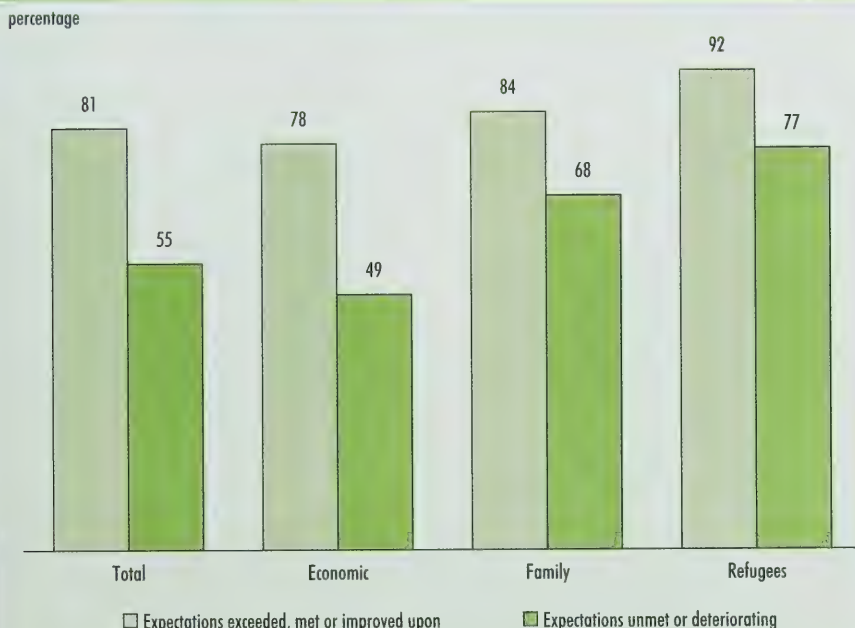
While most new immigrants believe that coming to Canada was the right decision, those who did not experience improvements in their material well-being or quality of life were less positive in this regard (Chart 13). For example, among economic immigrants whose material well-being improved between year two and year four, 73% consistently said that coming to Canada was the right decision.¹⁶ Among those whose material well-being stayed the same, 63% consistently said that coming to Canada was the right decision, while this was the case for 47% of those whose material well-being deteriorated between years two and four. The correlation between perceived changes in material well-being and positive views about immigrating to Canada is stronger among economic immigrants than family class immigrants and refugees. The same pattern is evident when perceived changes in quality of life are considered.

Furthermore, new immigrants who feel their expectations about life in Canada have been met have more positive assessments of their decision to come here than individuals who feel their expectations have not been met. As shown in Chart 14, 81% of immigrants who said their expectations have been exceeded, met or improved upon consistently said that coming to Canada was the right decision. In contrast, 55% of new immigrants whose expectations remained unmet or have deteriorated are consistently positive about their decision.

Most already taken steps to become Canadian citizens

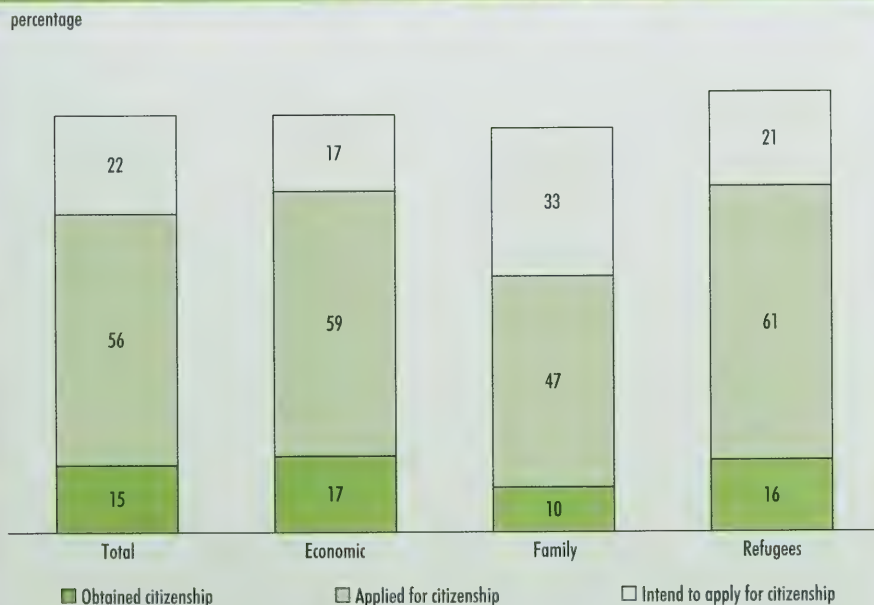
The generally positive views that new immigrants have regarding their decision to come to Canada are also reflected in their plans to become Canadian citizens. In order to become a Canadian citizen, landed immigrants must reside here for at least three years. By the time they were interviewed four years after landing, 15% of new immigrants had

Chart 14 Percent of new immigrants who consistently say they would make same decision to come to Canada, by whether or not expectations about life in Canada were met



Source: Longitudinal Survey of Immigrants to Canada, 2005.

Chart 15 Citizenship status of new immigrants*, 4 years after arrival in Canada



* The remaining share includes immigrants who are uncertain of their citizenship intentions or do not intend to apply for citizenship.
 Source: Longitudinal Survey of Immigrants to Canada, 2005.

already obtained Canadian citizenship and another 56% had already initiated the process (Chart 15). Combining these two groups, over 70% of new immigrants had already completed or had initiated the citizenship process. Another 22% said they intend to become Canadian citizens but had not yet started the process. The remaining 7% either said they were uncertain about their citizenship intentions or did not intend to apply for citizenship.

While perceived changes in material well-being are associated with views about whether coming to Canada was the right decision, changes in material well-being and 'met expectations' were not strongly correlated with citizenship intentions (see Tables 16 and 17).

Conclusions

Overall, most new immigrants have very positive views about the social and political environment in Canada. They point to the importance of safety and security, rights and freedoms, peace and stability and public institutions as aspects of Canadian life that they like most. These are important considerations in many new immigrants' decisions to stay in Canada.

However, new immigrants have less favourable assessments of their experiences in the Canadian labour market, with difficulties finding suitable employment remaining the problem they most frequently encounter. This is consistent with a growing body of economic research that documents the deteriorating financial and labour market characteristics of new immigrants. The perspectives of new immigrants also testify to the multi-dimensional nature of the problem. Individuals seeking employment report numerous difficulties, including lack of recognition for their educational credentials obtained abroad, lack of Canadian work experience and lack of recognition of work experience obtained abroad, language barriers and lack of contacts and social

networks in the work force. In many cases, new immigrants seeking employment face two or more of these barriers.

In other domains, such as finding housing, getting language training or accessing health care, new immigrants face challenges. Some of these are transitory in nature and are experienced during the initial stages of settlement, such as lack of credit history, transportation constraints and lack of knowledge of their city. After four years in Canada, the challenges facing new immigrants in these areas look much like those facing Canadians in general – concerns regarding housing affordability, waiting lists for health care services and financial and time constraints to training.

In spite of these challenges, most of the new immigrants who remain in Canada for four years are positive about their decision to come here. Most consistently say they would make the same decision to come here again and the majority has already initiated the process to become Canadian citizens. Furthermore, about two-thirds of them feel that their expectations of life in Canada have been exceeded, met or improved upon. That being said, the outlooks of new immigrants who have not made material gains while in Canada express less positive views. These individuals are more likely than others to feel their expectations about life in Canada have not been met and that coming here was not the right decision.

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5. Several responses were cited by less than 1% of respondents and these are not included in the chart. The figures in the chart do not total 100% for this reason.
 6. Of the LSIC respondents who did not live in Montréal, Toronto or Vancouver, 35% said the climate/physical environment was what they disliked most about life in Canada.
 7. Individuals were allowed to choose more than one response.
 8. GDP per capital (current international dollars) based, on purchasing power parity methodology, World Bank estimates. <http://unstats.un.org>. Accessed January 24, 2007.
 9. Citizenship and Immigration Canada, *Facts and Figures 2002*. Retrieved on March 1, 2007 at www.cic.gc.ca/english/pub/facts2002/index.html.
 10. Since the response categories regarding difficulties encountered in Canada were not read to respondents, the category "Finding adequate job" may include cases where respondents said they had had difficulty finding a job, without specifically referring to the appropriateness of the job.
 11. See Statistics Canada website. Retrieved on February 13, 2007 at <http://www12.statcan.ca/english/census01/products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&PID=68533&GID=517770&METH=1&APATH=3&PTYPE=55496&THEME=43&AID=0&FREE=0&FOCUS=0&VID=0&VNAMEE=&VNAMEF=&GC=99&GK=NA&SC=1&SR=1&RL=0&CPP=99&RPP=9999&d1=0&d2=0&d3=0>.
 12. Several different categorizations of the eight questions were tested for this analysis. In scenario one, language problems and lack of recognition of foreign credentials were both based on single response items in the LSIC; specifically, "language problems" and "Your qualifications from outside Canada were not accepted". Lack of work experience included two possible responses: "Your job experience from outside Canada was not accepted" and "Not having enough job experience in Canada". Lack of job contacts or networks included four possible responses: "Not having enough job references from Canada", "Not having connections in the job market", "Not knowing enough people who were working" and "Not having family or friends who could help". In scenario two, language problems and lack of recognition of foreign credentials were based on the same items as scenario one. In contrast, lack of work experience included three possible responses: "Your job experience from outside Canada was

not accepted", "Not having enough job experience in Canada" and "Not having enough job references from Canada". Lack of job contacts or networks included three possible responses: "Not having connections in the job market", "Not knowing enough people who were working" and "Not having family or friends who could help". In the third scenario, language problems were again based on a single item. Lack of recognition of foreign credentials included two items: "Your qualifications from outside Canada were not accepted" and "Your job experience from outside Canada was not accepted". Lack of work experience included two possible responses: "Not having enough job experience in Canada" and "Not having enough job references from Canada". And finally, lack of job contacts or networks included three possible

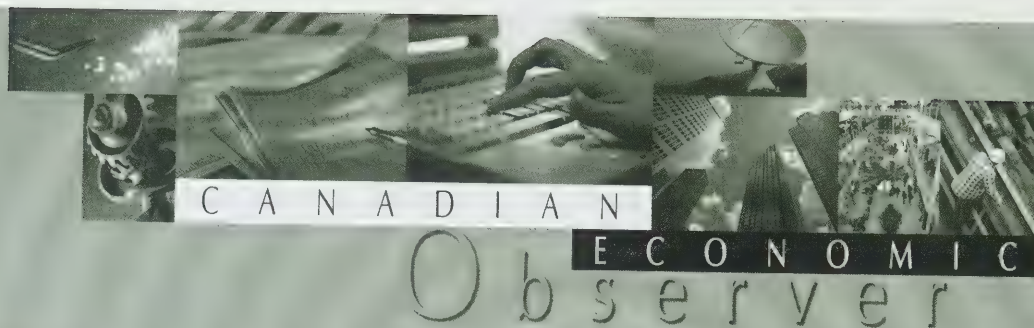
responses: "Not having connections in the job market", "Not knowing enough people who were working" and "Not having family or friends who could help". Overall, the results varied only slightly between the scenarios. The share of all job seekers experiencing only one of the four problems in Wave 3 varied from 29% to 30% depending on the classification used; the share experiencing two problems varied from 26% to 30%; and the share experiencing three or four problems also varied from 26% to 30%. The results presented in Table 10 are based on the second scenario listed above.

13. The LSIC contains a large battery of questions pertaining to all types of education and training taken or sought by respondents. Our discussion of language training is limited to a subset of these questions.

14. There was a slight change in the English wording of this question between Wave 1 and Wave 3. In Wave 1, respondents were asked "Generally speaking, would you say that your experience in Canada has been ...much better than you expected, somewhat better, about what you expected, somewhat worse, much worse than you expected?" In Wave 3 respondents were asked "Would you say that your whole experience in Canada has been much better than expected, somewhat better than expected, about what you expected, somewhat worse than expected, much worse than expected?"

15. The other 27% say their expectations have remained unmet or have deteriorated.

16. In other words, these individuals said 'yes' to the question "If you had to make the decision again, would you come to Canada?" each of the three times they were asked it.



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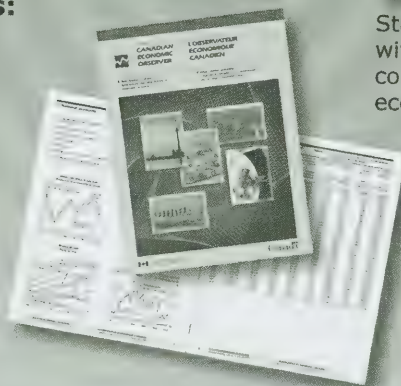
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Table 2 What immigrants like most about Canada, by immigration category (cited 4 years after arrival)

	Total	Economic	Family	Refugee
	percentage			
Social environment	32.1	31.6	32.4	35.4
Cultural aspects (e.g. freedom, human rights)	14.4	14.4	13.7	18.1
Social programs (e.g. health care)	7.5	6.4	9.7	8.4
People's attitudes	6.2	6.3	5.8	5.9
Cultural diversity	4.0	4.5	3.2	3.0 ^E
Opportunity	24.0	25.7	20.1	23.1
Educational opportunities for self and family	9.9	11.0	6.4	13.4
Can achieve desired lifestyle or QOL	9.2	10.0	8.4	5.1
Employment opportunities	2.8	2.6	3.1	3.1 ^E
Economic conditions	2.1	2.1	2.2	1.5 ^E
Safety and security	22.2	20.9	22.0	36.1
Safety for self and family	11.0	9.9	12.5	15.8
Peace, Political stability	10.4	10.3	8.4	19.6
Absence of ethnic, religious, racial tension	0.8	x	1.1 ^E	x
Climate and physical environment	19.1	20.1	20.4	3.8^E
Other	2.7	1.9	5.1	1.8^E
Good quality of housing	0.4 ^E	F	0.9 ^E	x
Other	2.3	1.7	4.2	1.6 ^E
Total	100.0	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

F too unreliable to be published

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 3 What immigrants dislike most about Canada, by immigration category (cited 4 years after arrival)

	Total	Economic	Family	Refugee
	percentage			
Social environment	12.7	14.0	10.4	10.5
Cultural aspects (e.g. freedom, human rights)	3.2	3.0	3.3	5.0 ^E
Health care system	5.3	6.3	3.9	2.2 ^E
People's attitudes	3.9	4.4	3.0	3.1 ^E
Lack of cultural diversity	0.3 ^E	0.3 ^E	x	x
Opportunity	31.5	37.7	19.2	20.6
Lack of educational opportunities for self and family	0.6	0.8 ^E	x	x
Cannot achieve desired lifestyle or QOL	0.8	1.0	x	x
Lack of employment opportunities	17.4	21.8	8.3	12.0
Poor economic conditions	1.6	2.0	0.6 ^E	1.5 ^E
High taxes	11.1	12.1	9.6	6.2
Safety and security	1.5	1.4	1.6^E	1.8^E
Do not feel safe/family not feel safe	0.9	0.7 ^E	1.1 ^E	1.5 ^E
Ethnic, religious or interracial tension	0.6 ^E	0.7 ^E	x	x
Climate and physical environment	26.7	22.5	34.3	37.5
Other	8.6	9.3	7.2	7.4
Poor quality of housing	0.3 ^E	0.3 ^E	x	x
Other	8.3	9.0	7.0	6.2
Does not dislike anything about Canada	19.0	15.4	27.2	22.0
Total	100.0	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 4 Reasons for staying in Canada cited by immigrants who plan to settle here permanently, by immigration category (cited 4 years after arrival)

	Total	Economic	Family	Refugees
	percentage			
All reasons cited				
Quality of life better in Canada	55.4	58.4	48.6	54.7
Improve future for family	38.5	42.7	27.3	43.3
Be close to family and friends	31.0	19.1	58.5	30.4
Peace / Absence of war	29.6	31.1	20.8	53.5
Access to education	23.4	26.9	13.6	31.6
Canada's social system	17.7	18.5	15.6	18.7
Political or religious freedom	15.8	16.7	11.1	28.5
Job opportunities	15.7	16.4	12.6	20.7
Cultural aspects	15.2	17.1	11.2	13.6
Working conditions	9.9	10.4	8.1	12.6
Salary/pay	7.7	7.7	6.7	10.7
Business climate/free market	3.7	4.4	2.3	3.2 ^E
Other	4.9	6.0	2.6	3.5 ^E
Main reason cited*				
Quality of life better in Canada	31.8	35.8	25.3	20.2
Be close to family and friends	20.2	9.8	46.3	12.9
Improve future for family	17.5	20.5	10.2	17.7
Peace / Absence of war	8.7	8.1	5.3	29.8
Access to education	5.9	7.1	2.7	6.6
Job opportunities	3.1	3.5	2.4	2.2 ^E
Cultural aspects	2.7	3.3	1.5 ^E	1.9 ^E
Canada's social system	2.7	2.8	2.6	1.3 ^E
Political or religious freedom	1.8	2.1	0.6 ^E	3.9 ^E
Working conditions	0.5 ^E	0.7 ^E	x	x
Business climate/free market	0.3 ^E	0.5 ^E	x	x
Salary/pay	0.3 ^E	0.3 ^E	x	x
Other	4.6	5.6	2.6	3.4
Total	100.0	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

* Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 5 Perceptions of quality of life and material well-being four years after arrival in Canada compared to two years after arrival, by immigration category

Compared to your situation two years after arriving in Canada, material well-being / quality of life four years after arrival is ...

	Better	Same	Worse	Total
	percentage			
All immigrants				
Material well-being (e.g. car, home, disposable income)	55.5	39.0	5.6	100.0
Quality of life (e.g. safety, freedom, pollution)	44.3	52.5	3.2	100.0
Economic immigrants				
Material well-being (e.g. car, home, disposable income)	57.2	37.0	5.8	100.0
Quality of life (e.g. safety, freedom, pollution)	44.5	52.2	3.3	100.0
Family class immigrants				
Material well-being (e.g. car, home, disposable income)	51.1	44.0	4.9	100.0
Quality of life (e.g. safety, freedom, pollution)	42.8	53.9	3.3	100.0
Refugees				
Material well-being (e.g. car, home, disposable income)	54.9	38.9	6.2	100.0
Quality of life (e.g. safety, freedom, pollution)	48.7	49.3	2.0 ^E	100.0

^E use with caution

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 6 Greatest difficulties had to deal with since arriving in Canada, by immigration category (cited 4 years after arrival)

	Total	Economic	Family	Refugees
	percentage			
All difficulties cited				
Finding an adequate job	46.1	54.2	28.6	35.3
Learning an official language/language barrier	26.2	22.9	30.8	40.6
Getting used to the weather	15.6	13.5	20.8	15.4
Missing social/family support from homeland	13.3	12.9	14.3	12.9
Adapting to new culture or values	13.0	12.0	15.1	15.6
Financial constraints	11.4	11.8	9.7	14.8
Getting credentials/work experience recognized	10.6	13.1	5.1	7.2
Lack of social interaction/new friends	6.9	7.5	6.1	4.7
Getting access to professional help	6.0	6.2	5.4	5.8
Facing discrimination or racism	4.4	5.2	2.6	4.2 ^E
Finding good quality housing	4.4	4.3	3.7	7.9
Getting access to education or training	2.7	2.9	1.7 ^E	3.8 ^E
Getting access to childcare	1.9	2.3	x	x
Other	10.5	8.2	17.5	5.8
Most important difficulty*				
Finding an adequate job	37.6	45.1	21.7	25.7
Learning an official language/Language barrier	17.5	14.3	22.4	29.6
Missing social/family support from homeland	6.4	5.5	8.4	7.2
Getting used to the weather	6.3	4.5	11.1	4.7
Adapting to new culture or values	5.3	4.9	6.0	6.9
Financial constraints	5.1	4.6	5.4	9.1
Getting credentials/work experience recognized	3.9	4.7	2.1	2.4 ^E
Lack of social interaction/new friends	2.0	2.1	2.0 ^E	1.6 ^E
Getting access to professional help	2.0	2.0	1.9 ^E	1.9 ^E
Finding good quality housing	1.1	1.0	0.9 ^E	2.5 ^E
Facing discrimination or racism	1.1	1.2	0.7 ^E	F
Getting access to education or training	1.0	1.1	x	F
Getting access to childcare	0.6	0.9 ^E	x	x
Other	10.3	8.2	16.6	5.8
Total	100.0	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

F too unreliable to be published

* Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 7 Job search experiences of new immigrants aged 25 to 44, by immigration category and time since arrival

	7 to 24 months	25 to 48 months
	percentage	
All immigrants aged 25 to 44		
% of who looked for a job	62.0	52.5
% of job seekers who experienced a problem	70.9	62.3
Economic immigrants aged 25 to 44		
% of who looked for a job	63.3	53.3
% of job seekers who experienced a problem	73.1	63.6
Family class immigrants aged 25 to 44		
% of who looked for a job	55.0	46.2
% of job seekers who experienced a problem	57.8	54.3
Refugees aged 25 to 44		
% of who looked for a job	61.4	58.0
% of job seekers who experienced a problem	71.6	63.1

Source: Longitudinal Survey of Immigrants to Canada, 2005.

**Table 8 New immigrants aged 25 to 44 who experienced difficulties finding employment:
Types of difficulties experienced, by immigration category and time since arrival**

	0 to 6 months	7 to 24 months	25 to 48 months
	percentage		
All difficulties cited			
All Immigrants			
Not enough Canadian job experience	62.6	62.4	49.8
No connections in the job market	33.1	37.1	37.1
Foreign experience not accepted	42.6	37.9	36.6
Foreign qualifications not accepted	39.2	38.0	35.4
Lack of employment opportunities	29.1	42.7	32.4
Not enough Canadian job references	33.2	34.8	32.1
Language problems	38.2	34.6	31.9
Not able to find a job in my field	14.9	34.8	29.8
Not knowing enough people working	15.5	20.1	20.4
Not having family or friends who could help	9.8	13.4	15.4
Discrimination	7.6	13.2	14.6
Not knowing how to find a job	9.7	10.1	10.4
Childcare constraints	n.a.	3.3	4.6
Transportation constraints	8.7	6.4	3.9
Not knowing the city	6.3	5.5	3.5
Other	9.0	9.5	12.9
Economic immigrants			
Not enough Canadian job experience	64.1	62.6	50.0
Foreign experience not accepted	44.1	39.7	38.8
No connections in the job market	34.7	38.4	38.2
Foreign qualifications not accepted	40.3	39.0	37.0
Lack of employment opportunities	30.9	44.2	33.6
Not enough Canadian job references	34.2	35.7	33.2
Language problems	37.9	33.7	31.3
Not able to find a job in my field	14.9	37.0	30.9
Not knowing enough people working	16.4	21.4	22.0
Not having family or friends who could help	10.8	14.3	16.9
Discrimination	7.7	13.6	16.0
Not knowing how to find a job	9.4	9.8	10.4
Childcare constraints	n.a.	3.3	4.2
Transportation constraints	7.9	5.8	3.5
Not knowing the city	5.6	5.2	3.1
Other	9.1	9.2	12.8
Family class immigrants			
Not enough Canadian job experience	54.6	63.6	49.8
No connections in the job market	24.6	31.6	35.5
Language problems	36.0	36.4	30.1
Not able to find a job in my field	13.4	25.6	27.5
Not enough Canadian job references	28.2	30.9	27.0
Lack of employment opportunities	18.5	35.2	25.0
Foreign experience not accepted	35.1	28.2	23.5
Foreign qualifications not accepted	33.1	31.0	22.5
Not knowing enough people working	10.1 [£]	12.9 [£]	12.3 [£]
Not knowing how to find a job	9.4 [£]	10.2 [£]	9.0 [£]
Childcare constraints	n.a.	x	x
Discrimination	7.0 [£]	10.8 [£]	6.8 [£]
Not having family or friends who could help	2.8 [£]	8.6 [£]	6.6 [£]
Transportation constraints	12.5	10.5 [£]	5.7 [£]
Not knowing the city	8.5 [£]	7.0 [£]	x
Other	8.0 [£]	8.5 [£]	14.2 [£]

**Table 8 New immigrants aged 25 to 44 who experienced difficulties finding employment:
Types of difficulties experienced, by immigration category and time since arrival
(continued)**

	0 to 6 months	7 to 24 months	25 to 48 months
	percentage		
Refugees			
Not enough Canadian job experience	51.2	57.8	45.1
Language problems	56.8	46.5	43.1
Foreign qualifications not accepted	32.9	35.4	35.8
Lack of employment opportunities	17.9 ^E	31.1	29.6
Foreign experience not accepted	30.5	28.0	29.1
Not enough Canadian job references	23.7	29.9	24.8
No connections in the job market	21.1 ^E	27.2	23.8
Not able to find a job in my field	20.1 ^E	17.1	18.5 ^E
Not knowing enough people working	12.3 ^E	15.6 ^E	13.3 ^E
Not knowing how to find a job	18.9 ^E	14.6 ^E	12.1 ^E
Not having family or friends who could help	7.8 ^E	9.3 ^E	11.7 ^E
Discrimination	5.3 ^E	12.4 ^E	9.3 ^E
Not knowing the city	16.4 ^E	7.1 ^E	F
Transportation constraints	15.1 ^E	7.3 ^E	5.1 ^E
Childcare constraints	n.a.	F	x
Other	9.3 ^E	14.2	13.3 ^E

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

F too unreliable to be published

Source: Longitudinal Survey of Immigrants to Canada, 2005.

**Table 9 New immigrants aged 25 to 44 who experienced difficulties finding employment:
Most serious difficulties experienced, by immigration category and time since
arrival**

	0 to 6 months	7 to 24 months	25 to 48 months
	percentage		
Most serious difficulty			
All Immigrants			
Not enough Canadian job experience	26.4	27.0	19.2
Language problems	19.1	15.1	15.9
Lack of employment opportunities	8.9	13.4	11.7
Foreign qualifications not accepted	12.4	11.1	11.6
No connections in the job market	4.7	5.3	9.2
Foreign experience not accepted	13.5	10.7	8.6
Not able to find a job in my field	3.0	6.0	6.9
Discrimination	1.3 ^E	2.5	3.8
Not enough Canadian job references	2.4	2.4	3.1 ^E
Not knowing how to find a job	1.8	1.1 ^E	1.6 ^E
Not knowing enough people working	0.5 ^E	0.5 ^E	1.1 ^E
Childcare constraints	n.a.	0.6 ^E	0.7 ^E
Not having family or friends who could help	x	x	F
Transportation constraints	1.0 ^E	x	x
Not knowing the city	x	x	x
Other	4.8	3.5	5.8
Total	100.0	100.0	100.0
Economic immigrants			
Not enough Canadian job experience	26.9	26.7	19.1
Language problems	17.9	14.2	14.7
Lack of employment opportunities	9.3	13.5	12.4
Foreign qualifications not accepted	12.2	10.7	11.2
Foreign experience not accepted	14.6	12.2	9.5
No connections in the job market	4.7	5.5	9.4
Not able to find a job in my field	2.7	6.3	6.7
Discrimination	1.4 ^E	2.4	4.4
Not enough Canadian job references	2.5	2.5	3.4 ^E
Not knowing how to find a job	1.8	0.9 ^E	1.5 ^E
Not knowing enough people working	0.5 ^E	x	1.1 ^E
Not having family or friends who could help	x	x	F
Childcare constraints	n.a.	0.7 ^E	x
Transportation constraints	x	x	x
Not knowing the city	x	x	x
Other	4.8	3.4	5.4
Total	100.0	100.0	100.0
Family class immigrants			
Not enough Canadian job experience	25.2	30.1	21.9 ^E
Language problems	23.2	15.5	19.6 ^E
Not able to find a job in my field	x	x	10.8 ^E
Foreign qualifications not accepted	14.8	13.7 ^E	9.9 ^E
No connections in the job market	x	x	9.0 ^E
Lack of employment opportunities	x	14.9	8.1 ^E
Foreign experience not accepted	7.7 ^E	x	x
Childcare constraints	n.a.	x	x
Not enough Canadian job references	x	x	x
Not knowing how to find a job	x	x	x
Not knowing enough people working	x	x	x
Discrimination	x	x	x
Not knowing the city	x	x	x
Not having family or friends who could help	x	x	x

**Table 9 New immigrants aged 25 to 44 who experienced difficulties finding employment:
Most serious difficulties experienced, by immigration category and time since arrival
(continued)**

	0 to 6 months	7 to 24 months	25 to 48 months
	percentage		
Family class immigrants (continued)			
Transportation constraints	3.1 ^E	x	x
Other	4.5 ^E	4.4 ^E	7.3 ^E
Total	100.0	100.0	100.0
Refugees			
Language problems	38.7	30.7	26.6
Foreign qualifications not accepted	7.5 ^E	10.7 ^E	19.6 ^E
Not enough Canadian job experience	17.8 ^E	25.8	13.9 ^E
Lack of employment opportunities	x	7.0	10.4 ^E
No connections in the job market	x	x	6.6 ^E
Foreign experience not accepted	F	x	x
Discrimination	x	x	x
Not able to find a job in my field	x	x	F
Not knowing how to find a job	x	x	x
Not enough Canadian job references	x	x	x
Not knowing enough people working	x	x	x
Not having family or friends who could help	x	x	x
Transportation constraints	x	x	x
Childcare constraints	n.a.	x	x
Not knowing the city	x	x	x
Other	F	F	7.7 ^E
Total	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

F too unreliable to be published

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

**Table 10 New immigrants aged 25 to 44 who experienced difficulties finding employment:
Number of specific problems encountered (Range 0 to 4)*, by immigration category
and time since arrival**

	0 to 6 months	7 to 24 months	25 to 48 months
	percentage		
All Immigrants			
None	9.5	11.5	15.3
One	29.1	29.1	29.1
Two	31.0	28.5	29.6
Three or four	30.3	30.9	26.1
Total	100.0	100.0	100.0
Economic immigrants			
None	9.1	11.3	15.0
One	27.6	28.3	27.8
Two	31.3	28.8	30.8
Three or four	32.0	31.6	26.4
Total	100.0	100.0	100.0
Family class immigrants			
None	12.8	13.4 ^E	19.3 ^E
One	37.8	33.6	33.8
Two	30.0	27.0	23.2
Three or four	19.4	26.1	23.8
Total	100.0	100.0	100.0
Refugees			
None	8.7 ^E	9.2 ^E	11.8 ^E
One	37.8	34.3	41.2
Two	27.1	27.5	23.9
Three or four	26.4 ^E	29.0	23.2 ^E
Total	100.0	100.0	100.0

^E use with caution

* Due to rounding, percentages may not add up exactly to 100%.

* Number of following difficulties encountered when seeking employment 1) lack of work experience 2) lack of foreign qualification recognition 3) language problems and/or 4) lack of job contacts.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 11 Language training activities of new immigrants during first four years in Canada by immigration category and time since arrival

	7 to 24 months	25 to 48 months
	percentage	
All immigrants		
Took a language course	25.8	9.9
No course but looked for information	11.5	8.8
Did not take training or look for info	62.7	81.3
Total	100.0	100.0
Economic immigrants		
Took a language course	24.9	9.6
No course but looked for information	12.0	9.1
Did not take training or look for info	63.0	81.3
Total	100.0	100.0
Family class immigrants		
Took a language course	23.1	8.5
No course but looked for information	10.1	8.1
Did not take training or look for info	66.9	83.5
Total	100.0	100.0
Refugees		
Took a language course	49.2	19.2
No course but looked for information	11.1	8.8
Did not take training or look for info	39.7	72.0
Total	100.0	100.0

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 12 Percent of new immigrants who experienced a difficulty accessing language training by immigration category and time since arrival

	7 to 24 months	25 to 48 months
	percentage	
All immigrants		
% of course takers who experienced a problem	17.9	20.3
% of information seekers who experienced a problem	35.3	41.7
% of all immigrants who experienced a problem	8.7	5.8
Economic immigrants		
% of course takers who experienced a problem	16.7	18.8
% of information seekers who experienced a problem	33.3	42.6
% of all immigrants who experienced a problem	8.2	5.8
Family class immigrants		
% of course takers who experienced a problem	20.7	24.4
% of information seekers who experienced a problem	40.6	38.6
% of all immigrants who experienced a problem	8.9	5.2
Refugees		
% of course takers who experienced a problem	19.0	20.4 ^E
% of information seekers who experienced a problem	40.6 ^E	39.9 ^E
% of all immigrants who experienced a problem	13.8	8.2

^E use with caution

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 13 Difficulties encountered when taking or seeking language courses*, by immigration category and time since arrival

	7 to 24 months				25 to 48 months			
	All immigrants	Economic	Family	Refugee	All immigrants	Economic	Family	Refugee
	percentage							
All problems cited regarding language training								
Time constraints	39.0	40.4	36.9	36.2 ^E	41.3	43.0	34.0	47.0 ^E
Financial constraints	27.3	33.9	13.8 ^E	23.7 ^E	28.1	31.7	20.1 ^E	22.3 ^E
The lack of courses/courses are full/ waiting list too long	30.3	35.6	23.6	15.8 ^E	23.5	25.3	17.0 ^E	26.6 ^E
Not knowing how to find out about language training	16.3	18.1	9.0 ^E	25.5 ^E	17.7	18.4	x	x
Communication problems	17.4	13.3	24.3 ^E	24.3 ^E	16.1	14.5 ^E	18.0 ^E	24.3 ^E
Not knowing where to find courses or programs	15.9	17.9	11.0 ^E	15.8 ^E	15.8	17.0	x	x
Transportation constraints	13.0	x	22.5 ^E	x	10.0	x	12.5 ^E	x
Childcare constraints	10.2	11.1 ^E	x	x	9.0	x	9.8 ^E	x
Not understanding the process or system	8.9	x	x	17.9 ^E	7.0 ^E	8.3 ^E	x	x
Discrimination	x	x	x	x	x	x	x	x
Other	11.5	10.8 ^E	12.7 ^E	13.1 ^E	8.7 ^E	6.4	13.9	F
Most serious problems cited regarding language training*								
Time constraints	25.5	24.0	29.1	25.2 ^E	27.3	28.4	22.5 ^E	29.6 ^E
Financial constraints	14.5	17.0	8.2 ^E	16.3 ^E	16.4	18.1	14.8 ^E	9.0 ^E
The lack of courses/courses are full/ waiting list too long	17.4	19.3	15.5 ^E	10.9 ^E	14.3	14.4 ^E	10.3 ^E	23.2 ^E
Communication problems	10.2	7.2 ^E	15.0 ^E	16.1 ^E	10.9	10.0 ^E	11.4 ^E	18.0 ^E
Not knowing how to find out about language training	4.9 ^E	5.9 ^E	x	x	7.8 ^E	8.0 ^E	x	x
Not knowing where to find courses or programs	6.7 ^E	8.1 ^E	x	x	4.5 ^E	5.3 ^E	x	x
Childcare constraints	4.2 ^E	4.5 ^E	x	x	4.3 ^E	4.1 ^E	x	x
Transportation constraints	4.5 ^E	x	9.5 ^E	x	4.0 ^E	x	x	x
Not understanding the process or system	x	x	x	x	F	x	x	x
Discrimination	x	x	x	x	x	x	x	x
Other	9.3	8.6 ^E	10.0 ^E	11.9 ^E	8.8 ^E	7.1 ^E	13.9 ^E	F
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the Statistics Act

^E use with caution

F too unreliable to be published

* Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005

Table 14 Selected housing characteristics of new immigrants, by immigration category and time since arrival

	0 to 6 months*	7 to 24 months	25 to 48 months
	percentage		
All Immigrants			
% looked for housing	76.5	53.7	42.8
% housing seekers experienced difficulty	38.4	25.5	17.5
% all experienced difficulty	29.4	13.7	7.5
Economic immigrants			
% looked for housing	90.3	60.3	46.4
% housing seekers experienced difficulty	42.9	26.1	16.7
% all experienced housing difficulty	38.8	15.7	7.7
Family class immigrants			
% looked for housing	42.5	37.4	33.3
% housing seekers experienced difficulty	14.1	19.5	16.5
% all experienced housing difficulty	6.0	7.3	5.5
Refugees			
% looked for housing	82.2	56.1	46.5
% housing seekers experienced difficulty	40.3	36.6	28.7
% all experienced housing difficulty	33.2	20.5	13.4

* Questions in LSIC Wave 1 regarding looking for housing are slightly different from the questions in Waves 2 and 3. Consequently, changes over time should be interpreted with caution.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 15 The degree to which expectations about life in Canada were met after 6 months and 4 years in Canada, by immigrant category

	Total	Economic	Family	Refugee
	percentage			
Better than expected... remained high	21.1	15.3	32.2	33.0
About what expected... remained the same	16.0	17.0	14.7	11.8
Worse than or about what expected... but improved	28.8	31.2	23.5	26.8
Worse than expected... remained low	11.0	14.4	3.8	6.0
Better than or about what expected... but declined	23.1	22.1	25.8	22.3
Total	100.0	100.0	100.0	100.0

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 16 Canadian citizenship status and intentions* by change in material well-being between year 2 and year 4, by immigration category

	Material well-being in year 4 compared to year 2		
	Better	Same	Worse
	percentage		
All immigrants			
Obtained or applied for citizenship	72.4	68.7	70.5
Intend to apply for citizenship	22.4	21.2	20.3
Do not intend to apply/Uncertain	5.2	10.1	9.2 [£]
Total	100.0	100.0	100.0
Economic immigrants			
Obtained or applied for citizenship	77.8	73.8	75.9
Intend to apply for citizenship	17.6	17.1	15.1
Do not intend to apply/Uncertain	4.6	9.1	9.0 [£]
Total	100.0	100.0	100.0
Family class immigrants			
Obtained or applied for citizenship	56.3	57.0	52.1
Intend to apply for citizenship	35.9	29.2	36.8 [£]
Do not intend to apply/Uncertain	7.8	13.8	11.1 [£]
Total	100.0	100.0	100.0
Refugees			
Obtained or applied for citizenship	79.7	74.3	78.4
Intend to apply for citizenship	19.4	23.6	17.1 [£]
Do not intend to apply/Uncertain	x	x	x
Total	100.0	100.0	100.0

x suppressed to meet the confidentiality requirements of the *Statistics Act*

£ use with caution

* Citizenship status and intentions 4 years after arrival.

Due to rounding, percentages may not add up exactly to 100%.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

Table 17 Canadian citizenship status and intentions* by degree to which expectations have been met by immigration category

	Expectations about life in Canada	
	Expectations exceeded, met or improved upon	Expectations unmet or deteriorating
	percentage	
All immigrants		
Obtained or applied for citizenship	71.0	70.9
Intend to apply for citizenship	22.8	19.8
Do not intend to apply/Uncertain	6.3	9.3
Total	100.0	100.0
Economic immigrants		
Obtained or applied for citizenship	76.6	75.6
Intend to apply for citizenship	18.0	15.7
Do not intend to apply/Uncertain	5.4	8.7
Total	100.0	100.0
Family class immigrants		
Obtained or applied for citizenship	56.9	55.6
Intend to apply for citizenship	33.5	31.7
Do not intend to apply/Uncertain	9.6	12.7
Total	100.0	100.0
Refugees		
Obtained or applied for citizenship	78.0	76.1
Intend to apply for citizenship	20.8	21.1
Do not intend to apply/Uncertain	x	x
Total	100.0	100.0

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* Citizenship status and intentions 4 years after arrival.

Source: Longitudinal Survey of Immigrants to Canada, 2005.

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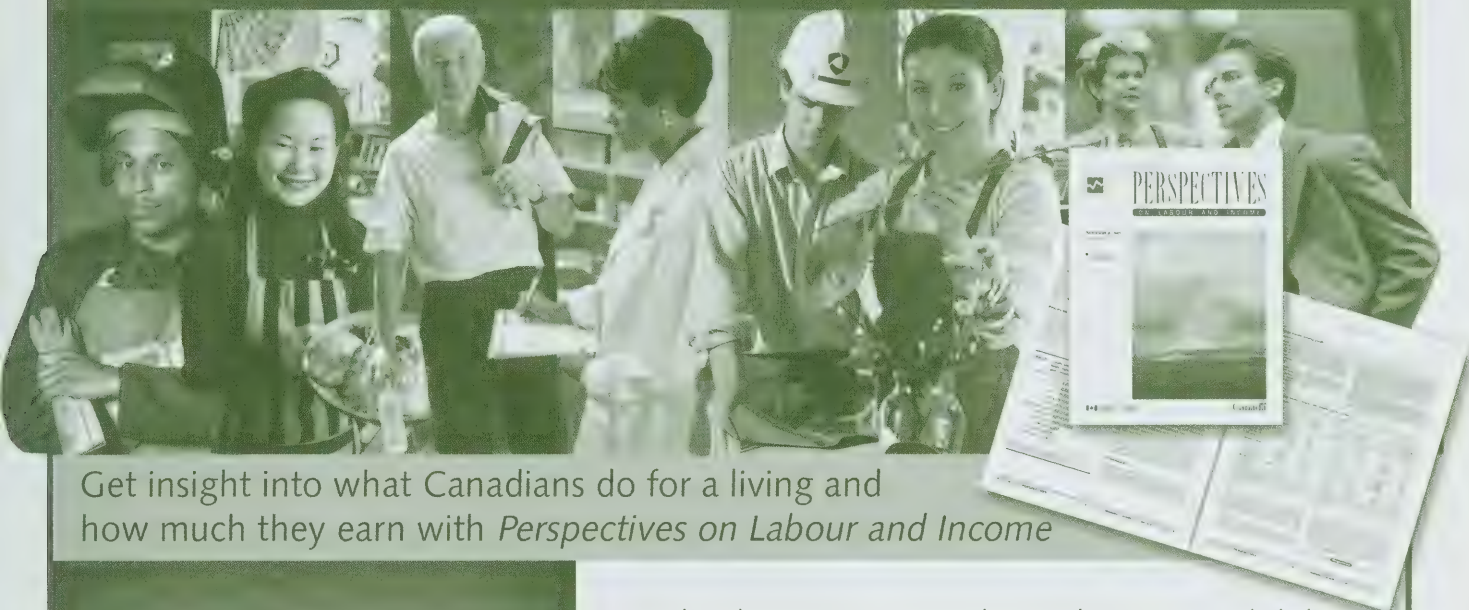
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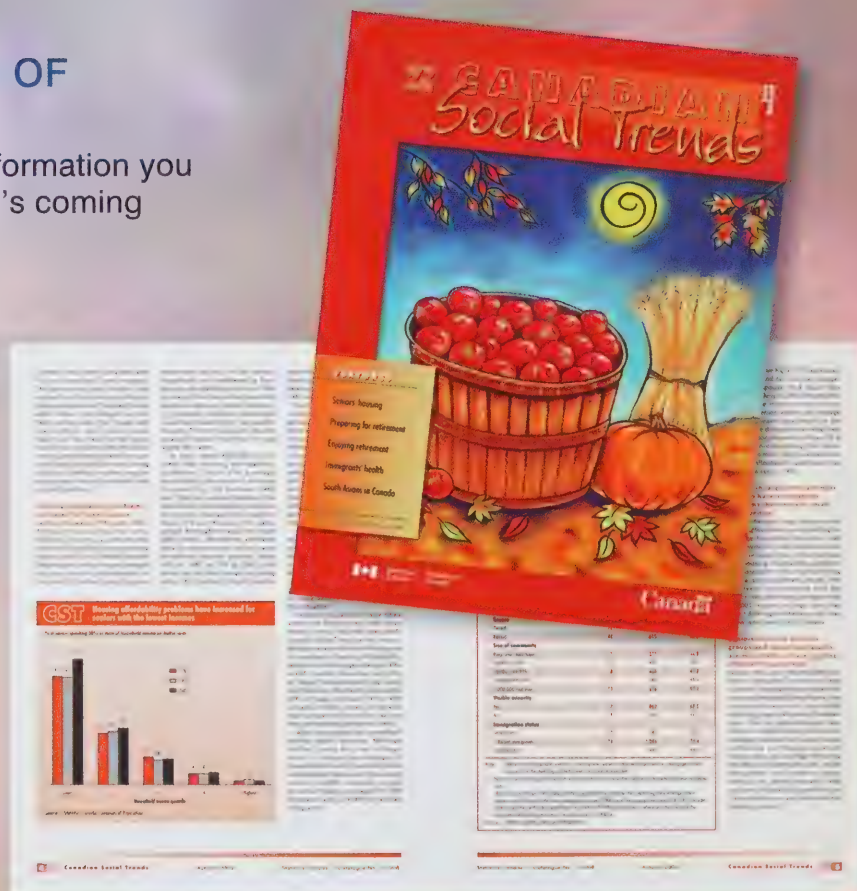
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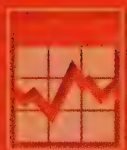
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Time spent with family during a typical workday, 1986 to 2005

by Martin Turcotte

Over the last two decades, the idea that a healthy balance between work and family is a legitimate as well as desirable goal took hold and became an important value for many workers. A survey conducted in 2003 found that, according to Canadian workers, the main indicator of a successful career was achieving a work-life balance, which ranked far ahead of salary, job challenges and level of responsibility.¹

Government policy makers also increasingly recognize the importance of work-life balance. Thus, according to Human Resources and Social Development Canada, "work-life balance has emerged as a critical public policy issue in Canada".²

For their part, some employers, in order to attract and retain good employees, offer their workers more latitude in choosing their hours of work, and the option of working from home or taking leave for family reasons.³ In some workplaces, the desire to spend more time with family is no longer looked on as a weakness. The many anecdotes of employees who turn down promotions or prestigious positions for fear of having less time to spend with family attest to this.⁴

Despite these workplace changes and the establishment of work-life balance policies, many workers feel they have less and less time to devote to their loved ones.⁵ Is this merely an impression, or are workers really spending less time than before

with family members? And is the length of the workday, that is, the number of hours worked, really the main factor influencing the amount of time workers spend with family members?

This study looks at the time workers spend with family members during a typical workday. Using data from four different cycles of the General Social Survey (GSS) on Time Use, it documents the evolution of the average time spent with family during the workday between 1986 and 2005. In particular, it accounts for factors that can contribute to an understanding of these changes.

Among those factors, the length of the workday is certainly a determining one. In general, the more time spent in paid employment on a given day, the less time there is remaining to devote to family. However, other factors may considerably influence time spent with family members; for example, time spent on family meals, watching television, on social activities, and so on. This study pays particular attention to these various factors which, while they have not been examined as often in previous studies, have nonetheless contributed to the changes in time spent with family over the last 20 years.

Workers are spending less time with family than they did 20 years ago

In 1986, workers spent, on average, 4.2 hours, or 250 minutes, engaged

in various activities with their spouse, their children or other family members. The nature of these activities varied, and could have included helping the children with their homework, watching television with their spouse and having dinner as a family. Nearly 20 years later, by 2005, this average number of hours had dropped to 3.4 hours, or 206 minutes, an average decline of about 45 minutes (Chart 1).

Seen from another angle, namely, workers who spend a lot of time with their family (six or more hours) and those who spend little time (one hour or less), the findings are the same. Workers are spending less and less time with family during the workday. In 1986, 23% of workers spent 6 hours or more with family members, while this was true of just 14% of workers in 2005. And the proportion of workers who spent one hour or less with their family increased, from 9% in 1986 to 14% in 2005.

A number of studies have shown that in contemporary urban societies, friends increasingly make up part of people's social networks, sometimes at the expense of family members.⁶ This might lead one to think that today's workers are "replacing" some of the time their predecessors spent with family members with time spent with friends. This, however, is not the case. In fact, the average time workers spent with their friends decreased by more than half between 1986 and 2005, from about



Source: Statistics Canada, General Social Survey, 1986, 1992, 1998 and 2005.

44 minutes on a typical workday to about 19 minutes.

If workers are not spending their time outside working hours with family members or friends, with whom are they spending it?

Time spent alone has been continually increasing for the last 20 years

According to the data from four different cycles of the GSS on time use, the answer to this question is simple: workers are spending more time by themselves! In fact, in 1986, workers engaged in solitary activities on average 133 minutes, or 2.2 hours per day (excluding time spent alone during working hours). By 2005, this time had increased by just over 40 minutes to 174 minutes, or 2.9 hours.

These trends are consistent with those observed in a previous study about the time Canadians spend alone in an average day.⁷ That study, which looked at the entire population

aged 15 and older, showed an increase in time spent alone on the order of 34% between 1986 and 1998 (from 4.4 hours to 5.9 hours).

Spending time alone is not necessarily a bad thing. Some people actually appreciate having time for themselves, whether for reflection, to listen to music they enjoy, or to spend time on their favourite hobby. Some authors even go so far as to extol solitude in books devoted entirely to the subject.⁸ In addition, researchers and philosophers of different stripes champion (or have done in the past) the idea that time spent alone, provided it is desired, can have substantial benefits in terms of creativity, spiritual quest, freedom of action and thought, and overall well-being.⁹ A number of Canadian workers would probably agree with some of these observations. Despite the fact that time spent alone had increased since 1986, about 33% of them reported in 2005 that they would like to spend *more* time alone.

This being said, obviously the more time one spends alone, the less time one can spend with other family members or with friends.¹⁰

Average family time is declining for nearly all subgroups of workers

A number of studies on time spent with family from a work-life perspective look at the impact on family life of various methods of work organization, including the number of hours worked, whether or not flexible hours of work are possible, and organizational culture.¹¹ They also look at the relationships between the characteristics of parents (their level of education, their gender, and so on), those of families (father and mother's employment status, number and age of children, and so on) and time spent with the children or spouse. For example, a number of researchers have studied the link between the hours worked by mothers and fathers and the time they spend with their children.¹² Others have assessed the influence of the parents' level of education on the time they spend with their children, in various national contexts.¹³

This study also examines the links between time spent with family, on the one hand, and, on the other, hours worked, worker characteristics and family characteristics. But it also analyzes additional factors to which previous studies have devoted little or no attention, such as the nature, duration and context of the various activities in which workers participate in their personal life outside working hours. For example, it looks at the connection between time spent at family meals and the total time spent with family members — be it the spouse, the children or other members of the household or family.

Table A.1 presents statistics on the average time spent with family members, grouped according to these three broad categories of factors: time spent at work, the characteristics of workers and families; the duration of

CST What you should know about this study

This study looks at the situation of workers who live with a spouse or child. It does not include workers who live alone or with other individuals, for whom time spent with family may mean something different.

The workers are individuals whose main activity, in the 7 days preceding the day of the interview for the General Social Survey (GSS) on time use, were working at a job. Only those respondents who had worked at least 3 hours during the reference day, not including commuting time, are included in the analysis. The purpose is to avoid confusing those workers who were on leave, who were far more likely to spend long hours with family members, with those who had worked during the reference day. In addition, because the study is interested in the connection between hours worked and time spent with family, it was important to consider only those workers who, on the day for which they were asked to provide details of all their activities, had worked a minimum amount of time.

The analysis included only the number of minutes that were spent with family members, friends or alone outside working hours. A number of workers spend time alone at work, and this time is not to be confused with the time available outside working hours.

Time spent with family means the total time during which the workers, while engaged in various activities (other than their work or personal care, including sleep), were in the presence of their spouse, child or other family members. For purposes of comparison among the four GSS cycles, unpaid work done for a family business or farm was not considered work time. Also, because the information gathered differed slightly over the four cycles of the GSS on time use, it was impossible to compare the data for certain more specific categories (such as changes in the time respondents spent with their children generally, including the youngest, the oldest and those living or not living at home).

The results shown in the table incorporated into the text are taken from an ordinary least squares regression. This statistical analysis simultaneously takes into account the various factors that influence time spent with family. Thus, the results show the association of a given variable, such as family status, independent of the influence of any other factors considered in the analysis (time spent at work, watching television, and so on).

The decomposition analysis uses the Oaxaca-Blinder approach. Thus, two additional regression analyses were done: one for 1986, and one for 2005. As the attempt was to determine how the situation would have evolved between 1986 and 2005 had the characteristics of the 2005 workers been identical to those of the 1986 workers, time spent with family was weighted using the 2005 regression coefficients. Using the reverse procedure, i.e., the 1986 regression coefficients to weight the changes in time spent with family, the study's qualitative findings remained the same. It is worth noting that in both models used for the decomposition analysis, time spent involved in various activities, such as paid work, was treated as a continuum (and not in categories, as in the models shown in the text). The purpose here was to simplify the interpretation of the results. A decomposition analysis was done with the duration variables classified into categories, but the main qualitative findings of the study remained the same.

In this study, the different factors associated with time spent with family were quantified. Unfortunately, it was impossible to determine whether the average "quality time" spent with family members followed a similar trend. In this study, we can only report that the average time workers spent with family, whether considered quality time or not, declined between 1986 and 2005.

the activities in which workers engage; and the nature of those activities.

Decrease in time spent with family involves several categories of workers

As Table A.1 shows, the number of hours of paid work is among the

factors most strongly correlated with time spent with family. Not surprisingly, as the workday increases, time spent with family decreases. In 2005, for example, people who had spent 11 hours or more of their day in paid employment had spent 1.8 hours on average with members

of their family. In contrast, people who had worked between 8 and 9 hours had spent 3.7 hours with family members.

Looking at family characteristics, workers living with one child under age 5 spent the most time with family, while lone parents living with

a youth or young adult spent the least amount of time participating in family activities. Age, area of residence, time spent at meals, personal care (including sleep), watching television, reading and so on are also factors associated with time spent with family. Other characteristics, however, such as level of education and gender, seem to be less strongly associated.

Table A.1 also shows that time spent with family members decreased between 1986 and 2005 for most subgroups of workers. For example, while women spent an average 248 minutes with their family members in 1986, this average was just 209 minutes in 2005. For men, the average time spent with family members decreased by 45 minutes, from 250 minutes in 1986 to 205 minutes in 2005. The decrease in time spent with family was observed for all regions, for all levels of education and for nearly all age groups.

How can all these results be separated out and the significance of all these associations determined? But most of all, why is it that workers with such dissimilar characteristics tend to spend less time with family members?

Why has family time decreased?

One probable explanation for the decrease in the average time that workers spend with their family members is that the characteristics of workers, and the time they devote to other activities such as work, changed significantly between 1986 and 2005. Specifically, it is possible that certain types of workers who tend to spend less time with their family members (such as those age 45 or older), made up a larger proportion of all workers in 2005. If so, this would lower the average time spent with family by workers taken as a whole.¹⁴

Looking at the statistics presented in Table A.2, this hypothesis seems plausible. For example, it can be seen that the proportion of workers age 45 or older, a subgroup that tends to

spend slightly less time with family than others, increased from 30% in 1986 to 44% in 2005. In contrast, the proportion of workers between ages 30 and 34, one of the age groups that spends the highest average amount of time with family, decreased from 17% to 12% of workers.

Table A.3 also shows that on average, workers devoted more time to paid employment in 2005 than in 1986 (536 minutes versus 506 minutes during a typical workday). This is also a significant change, which suggests that a number of workers have increasingly less time available to spend with family.

While interesting and relevant, the data contained in Tables A.1, A.2 and A.3 give no indication as to which of these many factors had the greatest influence on the decrease in family time between 1986 and 2005. In an attempt to identify this, a statistical analysis was done to take into account both the various factors influencing the time spent with family and the various changes in worker profiles between 1986 and 2005.

Increase in hours worked during a typical workday is the main reason for the decrease in time spent with family

Table 1 shows that, compared to 1986, workers spent an average 39 minutes less with family members in 1998 and 43 minutes less in 2005 (Model 1). This first statistical model does not take into account any of the factors associated with family time. Models 2 and 3 illustrate how this difference decreases when more and more factors are considered simultaneously. In Model 4, the differences between years are no longer of any statistical significance. This last result supports the hypothesis that the changes in worker characteristics and the time workers devote to various activities explain the decrease in time spent with family between 1986 and 2005. Of these characteristics, which had the most influence?

It is not surprising that the amount of time spent at work is the factor

that correlates most strongly with time spent with family: as work hours rise, family time falls. For example, holding all factors included in Model 4 constant, the estimated time spent with family was 52 minutes less for workers who devoted 9 to 10 hours to their paid employment versus those who devoted 7 to 8 hours.

The average time devoted to paid employment during the typical workday increased considerably between 1986 and 2005 and the proportion of workers who devoted many hours to their paid activities also increased (for example, while 17% of workers had devoted 10 hours or more to their work in 1986, 25% did so in 2005).

This increase in the average length of the workday has major implications for the overall trends in average time spent with family. According to another decomposition analysis (detailed results not shown), the increase in the average number of hours spent at work during the typical workday is the factor that contributed most to the decline in time spent with family between 1986 and 2005, accounting for about 39% of the decrease in family time. This proportion was higher than for all other factors considered in this study.

It should be noted that these results provide no information about time spent with family during workers' leave days. Further analyses would need to be done to verify whether different trends are emerging for those days.¹⁵

As time spent watching television increases, so does time spent with family

While watching television is often perceived as an individual activity, it is nevertheless quite often done as a family or a couple. And it is an activity that accounts for much of workers' free time. In 2005, after paid employment and personal care (including sleep), watching television (including movies, videos and DVDs) was the activity to which workers

	Model 1	Model 2	Model 3	Model 4		Model 1	Model 2	Model 3	Model 4
Predicted length of time spent with family by the reference person					6 to 7 hours	...	...	+ 33 min	+ 33 min
Year	250 min	247 min	246 min	226 min	7 to 8 hours	...	...	reference	reference
1986	reference	reference	reference	reference	8 to 9 hours	...	...	- 18 min	- 19 min
1992	- 19 min	- 23 min	- 16 min	n.s.	9 to 10 hours	...	...	- 48 min	- 52 min
1998	- 39 min	- 40 min	- 24 min	n.s.	10 to 11 hours	...	...	- 76 min	- 84 min
2005	- 43 min	- 41 min	- 16 min	n.s.	11 hours or more	...	...	- 151 min	- 151 min
Age					Time spent on personal care including sleep				
15 to 24	...	n.s.	n.s.	n.s.	Less than 7 hours	...	...	+ 53 min	+ 63 min
25 to 29	...	n.s.	n.s.	n.s.	7 to 8 hours	...	...	+ 21 min	+ 27 min
30 to 34	...	reference	reference	reference	8 to 9 hours	...	...	reference	reference
35 to 39	...	n.s.	n.s.	n.s.	9 to 10 hours	...	...	- 32 min	- 30 min
40 to 44	...	n.s.	n.s.	n.s.	10 to 11 hours	...	...	- 60 min	- 61 min
45 and older	...	n.s.	n.s.	-10	11 hours or more	...	...	- 114 min	- 109 min
Sex					Time for meals at home, snacks, coffee				
Women	...	reference	reference	reference	Did not eat at home	...	...	reference	reference
Men	...	- 11 min	n.s.	n.s.	1 to 24 minutes	...	...	n.s.	+ 23 min
Region					25 to 44 minutes	...	...	n.s.	+ 24 min
Atlantic Canada	...	+ 15 min	n.s.	n.s.	45 to 64 minutes	...	...	+ 16 min	+ 37 min
Quebec	...	n.s.	n.s.	n.s.	65 minutes or more	...	...	+ 32 min	+ 58 min
Ontario	...	reference	reference	reference	Trips by car or public transport				
Prairies	...	n.s.	n.s.	n.s.	No trips either by car or public transport	...	...	reference	reference
British Columbia	...	n.s.	n.s.	n.s.	1 to 60 minutes	...	...	n.s.	n.s.
Family structure					61 to 120 minutes	...	...	n.s.	- 14 min
Spouse, no children	...	reference	reference	reference	121 minutes or more	...	...	- 22 min	- 25 min
Spouse, at least one child aged 0 to 4	...	+ 55 min	+ 53 min	+ 42 min	Trips by foot				
Spouse, no children under 5, at least one child aged 5 to 12	...	+ 35 min	+ 32 min	+ 26 min	No trips by foot	...	...	reference	reference
Spouse, no children under 13, at least one child aged 13 to 24	...	n.s.	n.s.	n.s.	1 to 30 minutes	...	...	-12 min	- 11 min
Lone parent with at least one child aged 0 to 4	...	+ 61 min	+ 50 min	+ 59 min	31 minutes or more	...	...	n.s.	n.s.
Lone parent with no children under 5, at least one child aged 5 to 12	...	n.s.	n.s.	n.s.	Social activities outside the home				
Lone parent with no children under 13, at least one child aged 13 to 24	...	- 76 min	- 69 min	- 40 min	No social activities	...	...	reference	reference
Highest level of schooling					1 to 90 minutes	...	...	+ 13 min	+ 16 min
Elementary school	...	reference	reference	reference	91 minutes or more	...	...	+ 60 min	+ 60 min
Secondary diploma	...	n.s.	n.s.	n.s.	Read books, magazines, newspapers				
College or trade school diploma or certificate	...	n.s.	n.s.	n.s.	No reading	...	...	reference	reference
University degree	...	n.s.	n.s.	n.s.	1 to 60 minutes	...	...	- 16 min	- 11 min
Time spent on work and work-related activities					61 minutes or more	...	...	- 42 min	- 34 min
3 to 5 hours	...	...	+ 122 min	+ 121 min	Television, including watching videos or DVDs				
5 to 6 hours	...	...	+ 66 min	+ 68 min	No television	...	...	reference	reference
					1 to 60 minutes	...	...	+ 8 min	+ 44 min
					61 to 120 minutes	...	...	+ 19 min	+ 58 min
					121 to 180 minutes	...	...	+ 29 min	+ 69 min
					181 minutes or more	...	...	+ 55 min	+ 99 min
					Prevalence of certain activities				
					Watched television alone during the day				
					No	...	...	...	reference
					Yes	...	...	...	- 114 min
					Had a meal, snack or coffee alone				
					No	...	...	...	reference
					Yes	...	...	...	- 55 min
					Adjusted R-Square	0,01	0,05	0,33	0,47

... not applicable

n.s. Not statistically different than the reference group at $p < 0.01$.

Source: Statistics Canada, General Social Survey, 1986, 1992, 1998 and 2005.

devoted the most time during the average workday (79 minutes).

The results of the statistical analysis show that as time spent watching television on a given day increased, so did the time spent with family. For example, compared to a worker who had watched no television, a worker who had spent one to two hours in front of a television set had also spent an average of 58 minutes more with family members (holding constant all other factors associated with family time, i.e., equivalent workday duration, equivalent time spent on personal care, identical family status and so on). While people do not necessarily interact directly with others when watching television, they are nevertheless likely to be in others' company, which is less often the case when they are not watching television.

That being said, it is also possible that more and more workers are watching TV alone. The number of households with two or more sets increased from about 28% in 1987 to 63% in 2005. In addition, the percentage of households with three or more television sets has jumped in recent years, from 18% in 1997 to 27% in 2004. The fact that workers watched television alone, if only briefly during the day, completely changes the notion of a positive link between TV and time spent with family. In fact, workers who had watched television alone during a given day spent, on average, 113 minutes less with their family members than those who had not watched alone, holding constant all other factors considered in the analysis.

Workers' television viewing habits are not at all insignificant, since they had a major impact on the decrease in time spent with family between 1986 and 2005. The fact that increasingly more workers had watched television alone at some point in the day (27% in 2006 versus just 17% in 1986) accounts for nearly one quarter (24%) of the decline in time spent with

family. And the fact that on average, workers spent less time watching television (a drop of about 15 minutes between 1986 and 2005) accounted for about 9% of the decrease in the time they spent with family.

More people are spending mealtime alone

Mealtime, and especially suppertime, is the favourite time of day for family members to interact and talk about their day — and also sometimes argue! Between 1986 and 2005, two trends in workers' habits regarding meals, snacks and breaks negatively affected time spent with family. First of all, the average time spent at meals outside work hours decreased, from 60 minutes in 1986 to 45 minutes in 2005. But above all, workers were far more likely to have at least one meal, snack or coffee alone (only 17% in 1986, versus 27% in 2005). After time spent at work and time spent watching television, it is changes in workers' meal habits to which one should turn for a better understanding of the decrease in time spent with family. The fact that workers tend increasingly to eat alone accounted for 18% of the decline in the average time spent with family between 1986 and 2005. The fact that the average time devoted to meals decreased appreciably accounted for about 11% of the decline.

The correlation with time spent on personal care (including sleep) does not require much explanation. As with workday duration, the more time people spend washing, dressing or sleeping, the less time they have for activities with family members. What is most interesting is that time spent on personal care ranks fourth in importance, along with time spent on meals, among the factors that contributed to the decline in time spent with family. In other words, if the average time spent by workers on family activities declined between 1986 and 2005, this was owing in part to the fact that workers were spending more time sleeping, dressing and so on.

The last change to have a notable effect on the decrease in time spent with family between 1986 and 2005 is the declining prevalence and time spent by workers on social activities outside the home. In 1986, workers spent, on average, 23 minutes on social activities outside their home (going to a restaurant with one or more people, visiting people in their homes, and so on); this average dropped by more than half, to just 11 minutes in 2005. Obviously, taking part in social activities outside the home does not automatically mean spending more time with family members — people may, for example, spend this time socializing with friends or acquaintances. However, for people living in families, as was the case for the workers in this study, some of these outings included the spouse or children. Social activities are therefore an ideal opportunity to spend time as a family. The fact that the average time devoted to social activities outside the home decreased between 1986 and 2005 accounted for 7% of the decline in time spent with family.

Workers living with young children are spending more time with family

Among the other factors associated with the average time spent with family, but that contributed less to the decrease observed between 1986 and 2005, we might first mention family structure. As Model 4 shows, holding all other factors constant, the estimated time spent with family by workers with a child under age 5 is significantly greater than that spent by workers living with a spouse but no children. Parents living without a spouse, but with a young child (i.e., lone-parent workers), spent the most time with one or more family members — about one hour more than workers living with a spouse only. In contrast, workers living with only a youth or young adult spent the least estimated time with family of all categories. There is little surprise in this, since they have no spouse with whom to

share their activities outside work, and their children probably have their own activities that they want to pursue alone or with friends.

These results for workers as a whole obscure the fact that women living with a partner are more affected than men, in terms of time spent with family, by the presence of young children in the household. In fact, when children, especially young children, are present, women spend significantly more time with family than men do. Further analysis showed that female workers living with a spouse and a child under 5 spent an average 47 minutes more with the members of their family than did men with similar family structure (holding the other factors constant). The same analysis showed that women living with a spouse and at least one child between age 5 and 12 (but no preschoolers) spent an average 23 minutes more with family than did men with an identical family structure.

A recent study shows that men and women have increasingly been sharing unpaid housework equally, including caring for children.¹⁶ However, the same study shows that women have continued to devote appreciably more time than men to caring for the children by, for example, reading to them, taking them to the park, helping them with homework or driving them to various activities. These enduring distinctions probably explain to a large extent why women living with a partner and a child spend more time than men with one or more family members on a typical workday.

There was, however, no statistically significant difference between male and female lone-parent workers in terms of time spent with their family members. But it should be said that the majority of these lone-parent workers are women (about three-quarters in this study).

Time spent on trips, whether by car or on public transit, also correlates to a slight reduction in time spent

with family. However, because some of this travel involves taking children to and from activities, the statistical correlation is relatively weak compared to other factors. Canadian workers spent, on average, more time travelling to and from work in 2005 than in 1992.¹⁷ The analysis shows that this is not, however, one of the main contributors to the decrease in time spent with family.

The same is true of reading activities. Reading is generally a solitary activity, but can also be done in the presence of a child or spouse, when such are present in the household. Nevertheless, workers who spent more time in their day reading also spent a little less time with their spouse or children.

Finally, the findings showed that, when all other factors are held constant, gender, age, level of schooling and area of residence are not associated with a statistically significant decrease or increase in time spent with family. This is

CST What about the differences between men and women?

Table A.1 shows that, on average, male workers spend nearly as much time as female workers with family members during the typical workday. This lack of difference is confirmed, moreover, in several subgroups of the worker population.

In fact, aside from the difference between men and women based on the structure of their household (especially the presence of children, who had a greater influence on the time women spent with family), further analyses did not reveal differences between male and female workers based on age, area of residence or level of schooling. For example, holding the other factors constant, men between age 30 and 34 spent neither more nor less time with family members than did women in the same age group.

The same thing is confirmed regarding the association between workday duration and time spent with family; holding all the factors included in Model 4 constant, and making comparisons based on sex, a woman who had worked 9 hours, for example, spent the same average amount of

time with family as a man who had worked the same number of hours.

The only exception is women who had worked between 3 and 5 hours compared to men who had worked the same number of hours. We know that it is in this subgroup that the estimated time spent with family members increases most (Model 4 estimates that this group of workers spent about 2 hours more with family than the group of workers whose workday ranged from 7 to 8 hours). Further analysis comparing the workers according to gender revealed that women who had worked between 3 and 5 hours during the day spent an estimated 34 minutes less with family members than did their male counterparts (holding the other factors constant). It is, however, difficult to explain why this is so.

In short, aside from the presence of children in the homes of workers living with a partner, the impact of virtually all variables that were shown to correlate with time spent with family was the same for both men and women.

because the other factors mentioned earlier, such as length of the workday, family structure or television viewing, whether alone or not, had much more of an influence on time spent with family. Thus, for a workday of equivalent duration, for example, whether a worker was older or younger had no bearing on the likelihood of their spending more or less time with family.

Summary

Since 1986, the average time workers spent in activities with members of their family on a typical workday has declined appreciably, from about 4 hours and 10 minutes per day in 1986 to about 3 hours and 25 minutes in 2005. This decline has been observed in the majority of subgroups of the worker population, including men and women, workers living with a spouse only and those living with young children, workers with a college degree and those who have not completed high school. In short, the decrease in the time spent with family members was widespread.

This study identified a number of factors associated with the decrease in time spent with family between 1986 and 2005. The fact that the average time devoted to paid employment during the typical workday has increased appreciably since 1986 is the main factor that explains why people are spending less time with family. The other factors that had an impact on time spent with family over this period are, in order of relative importance: the fact that workers tend increasingly to watch television alone, eat alone, and spend less time on meals, television and social activities outside the home.

Other factors were correlated to time spent with family. The presence of a child in the family, especially a young child, was associated with a considerable increase in the number of minutes spent with family members during the typical workday. This was

especially true of female workers in this type of household. Also, time spent travelling by car and reading took away from time spent with family.



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10. Periods of time spent alone are not necessarily devoid of social interaction. Workers, when alone, may in fact be talking on the telephone or using computer technology such as e-mail or internet chat to communicate with their loved ones. Time spent at these activities, which involve social interaction despite the fact that the people are alone, is nevertheless marginal for the vast majority of workers. In 2005, workers spent, on average, less than 2 minutes per day talking on the telephone during the workday (but outside working hours). As for time spent e-mailing or internet chatting with others, the average was only about 4 minutes. In short, most of the time workers spend alone outside their hours of work entails no social interaction with family members.
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Table A.1 Average time spent by workers with their families during a typical workday in 1986 and 2005, by selected characteristics

	Average time spent with the family				Average time spent with the family		
	1986	2005	Change between 1986 and 2005		1986	2005	Change between 1986 and 2005
	minutes				minutes		
All workers	250	206	-44	Time spent on personal care including sleep			
Age				Less than 7 hours	303	244	-58
15 to 24	243	207	n.s.	7 to 8 hours	257	216	-40
25 to 29	247	208	-39	8 to 9 hours	250	213	-37
30 to 34	264	220	-44	9 to 10 hours	228	185	-43
35 to 39	246	223	-23	10 to 11 hours	208	179	n.s.
40 to 44	243	212	-31	11 hours or more	189	143	n.s.
45 and over	249	194	-54	Time for meals at home, snacks, coffee			
Sex				Did not eat at home	169	200	n.s.
Women	248	209	-39	1 to 24 minutes	233	183	-51
Men	250	205	-45	25 to 44 minutes	227	196	-31
Region				45 to 64 minutes	245	211	-35
Atlantic Canada	258	220	-38	65 minutes or more	285	233	-53
Quebec	237	209	-28	Trips by car or public transport			
Ontario	254	205	-50	No trips either by car or public			
Prairies	255	207	-48	transport	242	201	-42
British Columbia	250	201	-49	1 to 60 minutes	248	196	-52
Family structure				61 to 120 minutes	246	216	-30
Spouse, no children	231	191	-40	121 minutes or more	273	221	-52
Spouse, at least one child				Trips by foot			
aged 0 to 4	274	244	-30	No trips by foot	248	205	-43
Spouse, no children under 5, at				1 to 30 minutes	247	221	n.s.
least one child aged 5 to 12	271	227	-44	31 minutes or more	277	208	-70
Spouse, no children under 13, at				Social activities outside the home			
least one child aged 13 to 24	247	198	-49	No social activities	239	199	-40
Lone parent with at least one child				1 to 90 minutes	270	234	n.s.
aged 0 to 4	346	251	-95	91 minutes or more	338	324	n.s.
Lone parent with no children				Read books, magazines, newspapers			
under 5, at least one child				No reading	253	208	-45
aged 5 to 12	243	196	n.s.	1 to 60 minutes	242	205	-37
Lone parent with no children				61 minutes or more	236	174	-61
under 13, at least one child				Television, including watching videos or DVDs			
aged 13 to 24	150	132	n.s.	No television	218	184	-34
Highest level of schooling				1 to 60 minutes	236	193	-43
Elementary school	252	210	-42	61 to 120 minutes	241	216	-25
Secondary diploma	254	203	-50	121 to 180 minutes	260	228	-32
College or trade school diploma or				181 minutes or more	323	256	-67
certificate	243	205	-38	Prevalence of certain activities			
University degree	241	211	-30	Watched television alone during the day			
Time spent on work and work-related activities				No	268	231	-37
3 to 5 hours	379	345	n.s.	Yes	158	137	-21
5 to 6 hours	341	307	n.s.	Had a meal, snack or coffee alone			
6 to 7 hours	279	270	n.s.	No	264	235	-29
7 to 8 hours	270	236	34	Yes	213	166	-47
8 to 9 hours	260	219	41				
9 to 10 hours	220	202	18				
10 to 11 hours	206	164	42				
11 hours or more	118	107	n.s.				

n.s.: Not statistically different in 1986 than in 2005 at $p < 0.01$.

Source: Statistics Canada, General Social Survey, 1986 and 2005.

Table A.2 Change in the profile of workers living in a family, 1986 to 2005

	1986	1992	1998	2005		1986	1992	1998	2005
%					%				
Age					Family structure (continued)				
15 to 24	6	5	3	3	Spouse, no children under 5, at least one child aged 5 to 12	13	22	22	20
25 to 29	14	12	9	8	Spouse, no children under 13, at least one child aged 13 to 24	22	20	20	22
30 to 34	17	15	15	12	Lone parent with at least one child aged 0 to 4	1	1	1	1
35 to 39	18	18	18	15	Lone parent with no children under 5, at least one child aged 5 to 12	1	2	2	3
40 to 44	15	18	19	18	Lone parent with no children under 13, at least one child aged 13 to 24	3	2	4	4
45 and over	30	32	36	44	Highest level of schooling				
Sex					Elementary school	34	19	15	9
Women	35	40	42	41	Secondary diploma	35	35	34	31
Men	65	60	58	59	College or trade school diploma or certificate	16	26	27	30
Region					University degree	15	20	24	30
Atlantic Canada	7	8	7	7	Prevalence of certain activities				
Québec	27	24	23	23	Watched television alone during the day	17	25	30	27
Ontario	37	38	40	39	Had a meal, snack or coffee alone at home	28	41	45	42
Prairies	18	19	17	17					
British Columbia	10	11	11	13					
Family structure									
Spouse, no children	30	31	33	34					
Spouse, at least one child aged 0 to 4	21	21	17	16					

Source: Statistics Canada, General Social Survey, 1986, 1992, 1998 and 2005.

Table A.3 Changes in time workers devoted to certain activities, 1986 to 2005

	1986	1992	1998	2005		1986	1992	1998	2005
minutes					minutes				
Time spent on work and work-related activities	506	523	528	536	Trips by foot	5	5	5	3
Time spent on personal care including sleep	491	484	488	500	Social activities outside the home	23	16	14	11
Time for meals at home, snacks, coffee	60	52	44	45	Read books, magazines, newspapers	18	17	15	10
Trips by car or public transport	66	68	72	73	Television, including watching videos or DVDs	95	89	84	79

Source: Statistics Canada, General Social Survey, 1986, 1992, 1998 and 2005.

Keeping up with the times: Canadians and their news media diet

by Leslie-Anne Keown

News is the first rough draft of history — Philip Graham

An informed and engaged citizenry is considered by commentators and political scientists to be the cornerstone of an active and thriving democracy.¹ Of course, one of the main ways that a citizen becomes informed is by following news and current affairs. Furthermore, the type of media used is considered important, especially in relation to levels of political participation.²

Therefore, knowing who follows news consistently allows us to build a more thorough understanding of the amount of political activity Canadians engage in. In addition, it is important to know the sources they use to follow the news and just how varied their “diet” is.

This article explores Canadians and their consumption of news and current affairs media, using the 2003 General Social Survey (GSS) on social engagement. First, it looks at how Canadians who follow news and current affairs frequently differ from those who do not. Then the focus shifts slightly to consider only frequent consumers and the variety of media that comprises their news diet. It explores the sources of media that individuals use and factors that may influence these choices. Finally, the article concludes with a comparison of Canadians whose media consumption consists of only

television to Canadians who have a different diet, and asks how this influences their non-voting political activity.

Canadians are very likely to have a daily diet of news, especially seniors

In 2003, the vast majority of Canadians (89%) followed news and current affairs frequently, that is, daily or several times a week (Table 1). However, seniors aged 65 and over were more likely to follow the news on a frequent basis than young adults aged 19 to 24 (95% versus 79%). It is unclear why this difference exists but previous research points to differences in the amount of time that can be devoted to following the news, as well as to generational differences.³

Other important characteristics distinguish those who follow the news and current affairs frequently from those who do not. Men, people who are married, workers employed as professionals or managers, and those with higher incomes were more frequent users.

The immigrant status of Canadians and the region or city where they live have little influence on whether or not they follow news on a frequent basis. However, the language most often spoken at home does make

a difference. Canadians for whom French is their language of preference were most likely to follow the news at least several days a week.

Television is the staple food of the frequent user's media diet

So, most Canadians follow the news on a frequent basis but what is their media “diet” composed of?⁴ In this section, we look only at frequent users to see if their news consumption is composed of different media types or is a monodiet that lacks variety.

Frequent users almost always got some of their news from television, with 91% indicating that TV was a news source for them (Chart 1). Television can be thought of as the staple food of news consumption, but certain groups used it more than others. These groups included Canadians age 45 or older, women, people who live in a married or common-law relationship, those who have household incomes below \$60,000 per year and people living in Quebec. These patterns closely follow overall television viewing patterns in Canada and mirror the findings of previous work on the kinds of television programs watched by Canadians⁵ (Table 2).

Almost as substantial an element in their daily news consumption

Table 1 Seniors, men, those who are not married and those with higher incomes are frequent followers of news and current affairs

	% who follow the news daily/weekly		% who follow the news daily/weekly
All respondents 19 years and older who follow the news frequently	89	Immigration and language	
Demographic characteristics		Born in Canada	
Age		Yes	89
19 to 24	79	No	90
25 to 44	87*	Language used at home	
45 to 64	93*	English	89
65 and older	95*	French	91*
Gender		Other	87*
Women	88*	Place of residence	
Men	91	Region	
Marital status		Atlantic	88*
Married/common-law	91*	Quebec	91*
Other	86	Ontario	90
Work and education		Prairies	88*
Highest level of education		BC	88*
No postsecondary	87*	Urban/rural area	
Some postsecondary	91	Montreal	91*
Occupation type		Toronto	92*
Professional/manager	93*	Vancouver	89*
Other occupations	88	Other CMA ¹	89*
Household income		CA ²	88*
Less than \$29,999	87	Rural	87
\$30,000 to \$59,999	89*		
\$60,000 and more	92*		
Not stated	87		

1. Census metropolitan area.

2. Census agglomeration.

* Significantly different than reference group shown in italics at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2003.

was print journalism, with 70% of frequent users reporting that the newspaper was one of their sources for gathering information on news and current affairs. People with a higher consumption of newspapers included those 45 years and older, men, people with postsecondary education, individuals with household incomes above \$60,000 per year, and those Canadians in a professional or management occupation.

The third most common news media source was radio, which is where 53% of frequent users reported that they got some of their daily news. Seniors consumed radio at a much

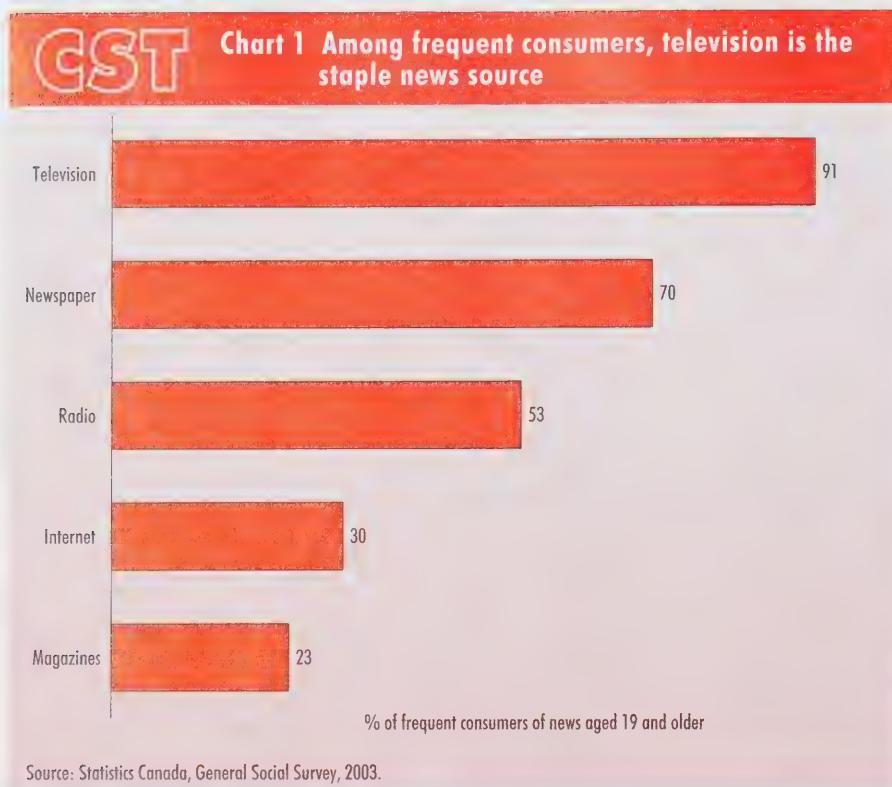
higher rate than other Canadians, at 83%. Other groups showing higher use of radio as a news source included those who are married or living common-law, individuals with some postsecondary education, Canadians in a professional or management occupation, those who speak English most often at home, and Canadians living outside Quebec.

Internet part of the media diet, especially among younger Canadians

In 2003, 30% of Canadians who followed the news frequently reported using the Internet to do so. This is not

surprising, since other studies have shown that accessing online news services is one of the most common things to do on the Internet.⁶ (Readers should note that these results are based on use in 2003 and that Internet use patterns have changed considerably since then.)

Amongst Canadians who followed the news on a frequent basis, using the Internet was most common among 19- to 24-year-olds (42%) and least common among seniors (9%). Women were less likely than men to use the Internet as a news source; likewise, those with some postsecondary education used it much more often



than those without. Professionals and managers were twice as likely as other occupational groups to include the Internet as part of their daily news diet, perhaps because people in these types of jobs tend to use the Internet at work. Canadians with higher incomes also used Internet news more frequently than those in lower income groups. (Some of these differences may have lessened as the Internet has become accessible to more Canadians.)

One key finding is that frequent news users born outside Canada were more likely to use the Internet as a news source. The Internet can provide news about other areas of the world in a more in-depth manner than might be possible with the more conventional sources of print and broadcast news. Immigrants may also use the Internet more commonly as a news source due to the availability of news in their language of preference.

The value of the Internet as a multilingual medium is somewhat supported by the differences

observed in Internet use as a news source depending on the language that is most commonly spoken at home. Those who speak a language other than English or French at home were more likely to be users of Internet news than those who speak one of the two official languages. In 2003, those who speak French were the least likely language group to use the Internet as a news source. This may be related to Internet access rather than language, as Quebec had lower levels of Internet use for all purposes than other areas in Canada at that time.⁷

Canadians like to sample news from multiple media sources

Canadians who follow the news daily or several times a week tend to get their information from more than one media source. Only 17 % of those who followed the news frequently used a single source (usually television). The vast majority (72%) consumed from two to four sources of news. About 10% used all five types of media to get their news. On average, frequent news

users consulted 2.7 media sources to meet their news requirements. Those 45 to 64 years of age used more sources than other age groups; men used more sources than women. Those with postsecondary education tended to select a wider variety of sources than those with a high school diploma or less.

One of the most varied media diets is found among those whose occupation is professional or manager. In this group, the average number of media sources used was 3.0, which is significantly higher than that of other occupational categories (2.6). This trend was also reflected in the finding that those Canadians whose household income is more than \$60,000 per year consumed a wider variety of news media than any other income group.

Language preference also influences the number of sources from which Canadians gather their daily news. Frequent users who speak English at home had the most varied sources, followed by those who speak a language other than English or French. Those who speak French in the home had the least varied media consumption.

Not surprisingly, given the influence of language on source variety, region of the country also influences media selection. Frequent users in Quebec and the Atlantic provinces chose fewer sources than their counterparts in other regions of Canada. Of those Canadians living in the three major census metropolitan areas (CMAs), those living in Montréal showed the lowest average number of media sources. Similarly, those living in rural areas had the least varied media consumption when compared to those in more urban centres.

These results suggest that the variety of media frequent news users consume may be directly related to the size of the media marketplace. In order for the news diet to be varied, it is essential that media in many forms and in one's language of preference be readily available and personally accessible. Thus, when the selection

Table 2 Frequent users rely on television but usually consume more than one source of news

	% of frequent users					Average number of sources used
	Television	Radio	Newspaper	Magazines	Internet	
All respondents 19 years and older who follow the news frequently	91	53	70	23	30	2.67
Demographic characteristics						
Age						
19 to 24	86	41	66	20	42	2.55
25 to 44	89*	54*	67*	21*	38*	2.70*
45 to 64	92*	57*	73*	25*	27*	2.73*
65 and older	95*	83*	74*	24*	9*	2.55
Gender						
Women	92	52	68*	22	24*	2.58*
Men	90	54	73	24	36	2.76
Marital status						
Married common-law	91*	56*	72*	23*	30	2.71*
Other	89	49	68	21	30	2.58
Work and education						
Highest level of education						
No postsecondary	93	48	61	18	20	2.40
Some postsecondary	89	57	73	26	39	2.81
Occupation type						
Professional/manager	91*	60*	75*	30*	48*	3.04*
Other occupations	88	52	69	21	24	2.58
Household income						
Less than \$29,999	93*	48*	61*	18*	20*	2.40*
\$30,000 to \$59,999	91*	53*	68*	21*	27*	2.59*
\$60,000 and more	87*	59*	76*	28*	41*	2.92*
Not Stated	92*	49	69*	19*	21*	2.50*
Immigration and language						
Born in Canada						
Yes	91	54	71*	23	28*	2.67
No	90	52	67	20	36	2.68
Language used at home						
English	89	57	75	25	32	2.79
French	94*	44*	61*	19*	21*	2.39*
Other	90*	49*	62*	18*	34*	2.53*
Place of residence						
Region						
Atlantic	91*	58*	67*	17*	24*	2.57*
Quebec	94*	46*	62*	19*	23*	2.44*
Ontario	89	55	74	24	34	2.75
Prairies	90	56*	74	24	29*	2.73*
BC	89	57*	75*	27*	36*	2.81*
Urban/rural area						
Montréal	93	48*	63	21*	29*	2.53*
Toronto	90*	55*	73*	24*	39*	2.80*
Vancouver	88*	57*	74*	25*	39*	2.83*
Other CMA ¹	89*	54	73*	24*	32*	2.73*
CA ²	92	53	74*	23*	26*	2.67*
Rural	92	54	64	20	19	2.48

1. Census metropolitan area.

2. Census agglomeration.

* Significantly different than reference group shown in italics at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2003.

offered is more limited, the tendency will be to turn to television as it is the staple that is almost universally available.

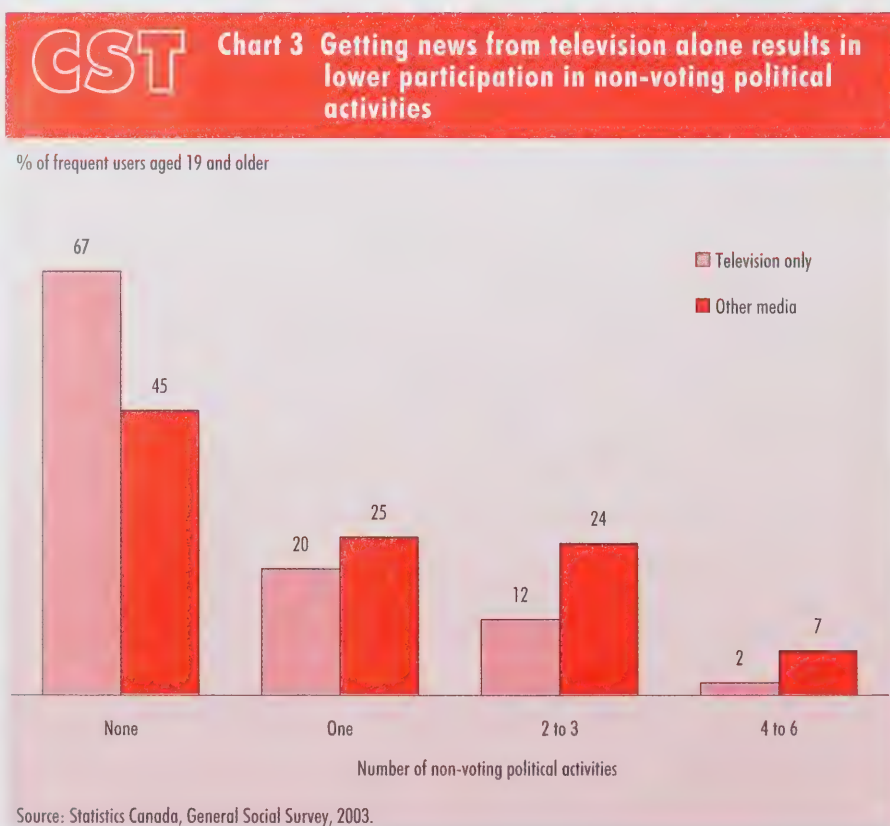
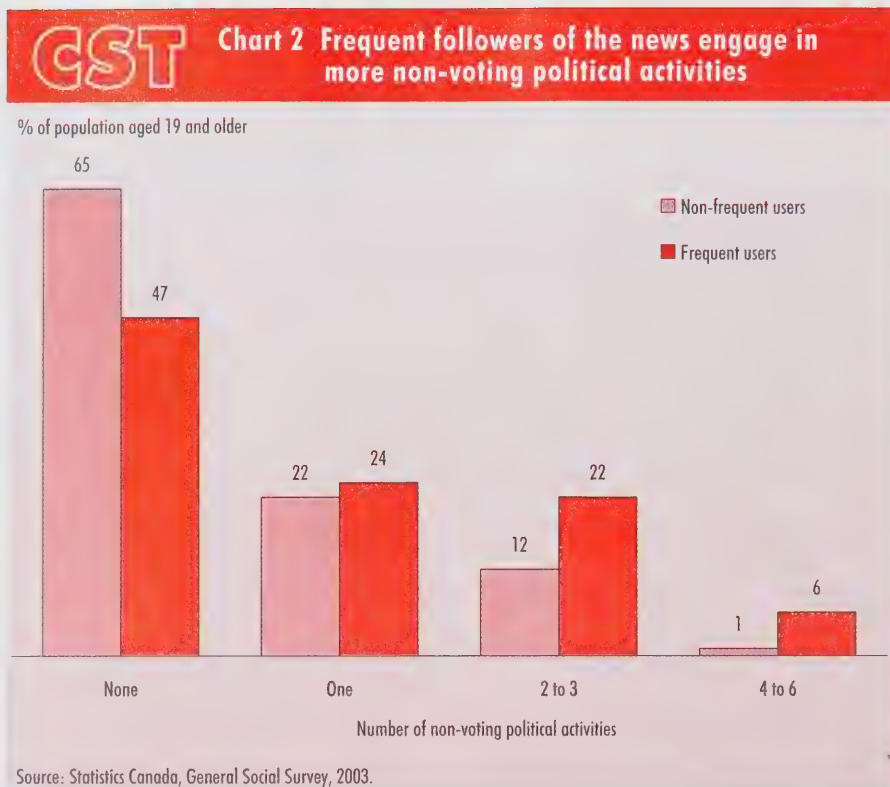
Frequent users who speak English and live in more urban areas are less reliant on television only

Making television their sole choice to follow news and current affairs was more common among younger adults, women, those who are single, those with no postsecondary education and those in lower income brackets.

Choosing television alone from the media sources available was also more common amongst those who use a language other than English as their language of preference. This is also reflected when considering geographic location. Higher percentages of frequent news user who live in Montréal or more rural areas selected television as their sole choice of media source. This reflects patterns of overall television viewing in Canada.⁸

Frequent users are more likely to engage in non-voting political activities

Frequent users of the news tended to be more involved in non-voting political activities such as attending public meetings; searching for information on a political issue; volunteering for a political party; expressing their views by contacting a newspaper or politician; signing a petition; or participating in a march or demonstration (Chart 2). The difference was particularly pronounced when considering those who did not participate in any activities and those who participated in four or more. This finding lends support to previous research that suggests that following the news and current affairs is related to being a more politically engaged citizen.⁹ Moreover, these same studies argue that individuals who use media that require them to read and engage more actively with the material being presented have higher levels of civic



GST What you should know about this study

The 2003 General Social Survey (GSS) on social engagement surveyed about 25,000 Canadians aged 15 and older living in private households in the 10 provinces. It was developed to explore the measurement of social capital and develop a better understanding of how social networks and norms of trust and reciprocity contribute to individual and social outcomes. For this purpose, the survey collected information on a wide range of activities, such as social contacts with family, friends and neighbours; involvement in organizations, political activities and volunteer work; and the informal care they provide or receive. It also explored the values and attitudes and the level of trust in people and in public institutions. Overall, the survey provided comprehensive information on the many ways that Canadians engage in civic and social life.

This article looks at respondents 19 years and older in order to include only those individuals who have reached the age of majority for political participation. Voting patterns of respondents are not considered because eligibility to vote (i.e. citizenship) was not collected by the survey.

Frequent users: Individuals who follow the news and current affairs at least several times a week.

News media/media diet: The sources Canadians use to access the news and current affairs (television, newspaper, radio, magazines, Internet).

engagement and more knowledge of current affairs than those who use television as their primary or only source of news.¹⁰

And certainly, the GSS data show that the media one selects does influence participation in non-voting political activities. Those frequent users who chose only television tended to participate in fewer non-voting political activities (Chart 3). In fact, in terms of their involvement, those who used television as their only source of news closely mirrored those who did not follow the news at all. This finding supports previous U.S. research that shows lower rates of political participation are associated with using TV as the only source of news.¹¹

Summary

Most Canadians follow news and current affairs at least several times a week. Few Canadians use a single media source for their news. However, the variety of the media sources consumed does seem to be related to access. It appears that variety is dependent on having sufficient access to media in many forms and in one's preferred language. Canadians living in rural areas and those who speak French most often at home find access more difficult than other frequent news consumers. When access to additional sources of media is blocked—for whatever reason—it appears that people turn to television for news and current affairs information.

The level of political engagement Canadians report is also influenced by their frequency of news consumption and the choices they make from the media sources available to them. Frequent followers of the news participate in more political activities, but relying only on television results in a pattern of political activity that closely mirrors those who do not follow news at all. Those who follow news frequently in a variety of media sources seem more likely to be politically engaged Canadians.

GST

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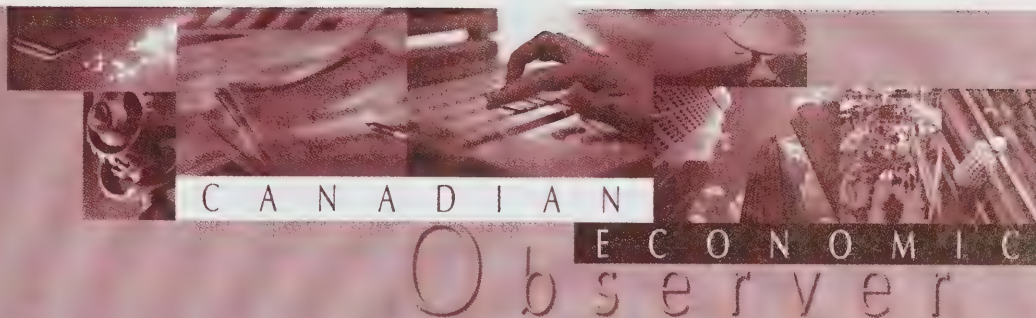
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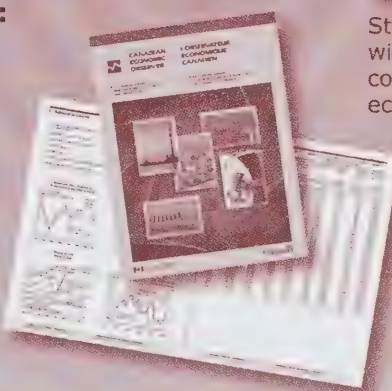
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Aboriginal languages in Canada: Emerging trends and perspectives on second language acquisition

by Mary Jane Norris

Canada enjoys a rich diversity of peoples, cultures and languages. In addition to French and English, the country's two official languages, and numerous immigrant languages, there are many languages indigenous to Canada itself. Indeed, across Canada there are some 50 or more individual languages belonging to 11 Aboriginal language families. These languages reflect distinctive histories, cultures and identities linked to family, community, the land and traditional knowledge. For many First Nation, Inuit and Métis people, these languages are at the very core of their identity.

Aboriginal peoples, though, are confronted with the fact that many of their languages are disappearing, an issue which may have profound implications. Over the past 100 years or more, at least ten once-flourishing languages have become extinct. However, declining trends in the intergenerational transmission of Aboriginal mother tongues are being offset to a degree by the fact that Aboriginal languages are also being learned as second languages.

Only one in four Aboriginal people speaks an Aboriginal language

Currently, only a minority of the Aboriginal population in Canada is able to speak or understand an Aboriginal language. According to 2001 Census data, of the 976,300 people who identified themselves as Aboriginal, 235,000 (or 24%) reported that they were able to conduct a conversation in an Aboriginal language.¹

This represents a sharp drop from 29% in 1996,² and appears to confirm most research which suggests that there has been substantial erosion in the use of Aboriginal languages in recent decades. Another definite indicator of the erosion is the declining percentage of the Aboriginal population whose mother tongue is Aboriginal. In 2001, just 21% of Aboriginals in Canada had an Aboriginal mother tongue, down from 26% in 1996.

However, the decline in mother tongue population has been offset to some degree by the fact that many Aboriginal people have learned an Aboriginal language as a second language. In 2001, more people could speak an Aboriginal language than had an Aboriginal mother

tongue (239,600 versus 203,300). This suggests that some speakers must have learned their Aboriginal language as a second language. It appears that this is especially the case for young people.

Learning an Aboriginal language as a second language cannot be considered a substitute for learning it as a first language.³ Nevertheless, increasing the number of second language speakers is part of the process of language revitalization, and may go some way towards preventing, or at least slowing, the rapid erosion and possible extinction of endangered languages. Indeed, the acquisition of an Aboriginal language as a second language may be the only option available to many Aboriginal communities if transmission from parent to child is no longer viable.

As well, in gaining the ability to speak the language of their parents or grandparents, young Aboriginal people will be able to communicate with their older family members in their traditional language. It is also thought that the process itself of learning an Aboriginal language may contribute to increased self-esteem and community well-being, as well as cultural continuity.⁴

GST Home language of today, mother tongue of tomorrow

A crucial element affecting the long-term viability of a language is simply how many people speak it at home. The language that is most often spoken within the home is more likely to become the mother tongue of the next generation; if not, the transmission from one generation to the next will likely be broken. Indeed, as the 1996 Report of the Royal Commission on Aboriginal Peoples concluded, the viability or continuity of a language is dependent on it being used on a daily basis, ideally as the primary home language.

Long-term declines in language continuity translate into decreasing shares of children acquiring an Aboriginal mother tongue, and increasingly older mother tongue populations. Erosion of home language use has seen the proportion of children (ages 0 to 19 years) in the Aboriginal mother tongue population fall from 41% in 1986 to just 32% in 2001, while the percentage of adults aged 55 and over increased from 12% to 17%.

These trends indicate that many Aboriginal languages – even larger ones – will be confronted with the challenges of continuity for the next generation. In 2001, just 13% of the Aboriginal population reported that they spoke an Aboriginal language most often in the home, while an additional 5% reported using one regularly. This proportion is lower than the rates for people who can converse in an Aboriginal language as well as those for mother tongue speakers (24% and 21%, respectively). For example, even though Ojibway has the third largest mother tongue population in Canada, its use as the major home language is diminishing.

The prospects of transmitting a language as a mother tongue can be assessed using an index of continuity, which measures the number of people who speak the language at home for every 100 persons who speak it as their mother tongue. Over the period 1981 to 2001, the index of continuity decreased from about 76 to 61. Both men and women in practically all age groups experienced a decline in language continuity as their home language use shifted from Aboriginal to non-Aboriginal languages. The trend was most pronounced for women, especially those in the child-bearing and working-age years.

However, information on languages spoken "regularly" at home (as distinct from "most often") began to be collected with the 2001 Census. In 2001, while the number of people speaking an Aboriginal language most often in the home was 129,300, just over 50,000 additional people were speaking one at home on a "regular" basis. This information could be particularly relevant to endangered languages, which tend to be spoken "regularly" at home but not "most often." For example, only 10% of persons reporting Haida as a home language speak it "most often", while 90% speak it "regularly." In contrast, the majority of viable languages tend to be spoken in the home on a "most often" rather than on a "regular" basis, for example Inuktitut (82%), Cree (69%) and Ojibway (56%).¹

1. Norris, M.J. and L. Jantzen. 2003. "Aboriginal Languages in Canada's Urban Areas: Characteristics, Considerations and Implications." In *Not Strangers in These Parts: Urban Aboriginal Peoples*. Eds. David Newhouse and Evelyn Peters. Ottawa: Privy Council Office.

Aboriginal second language speakers

According to the 2001 Census, 20% of the total population who could speak an Aboriginal language – over 47,100 people – had learned it as a second language. And it appears that second language learning has been on the rise. The index of second language acquisition indicates that for every 100 people with an Aboriginal mother tongue, the number of people able to speak an Aboriginal language increased from 117 to about 120 speakers between

1996 and 2001 (Table 1). It appears that growing numbers of second language speakers may increasingly be offsetting the declining size of mother tongue populations.

What is perhaps even more significant to their long-term viability is the fact that second language speakers tend to be considerably younger than people who learned an Aboriginal language as their mother tongue. In 2001, for example, about 45% of second language speakers were under age 25, compared to 38% of mother tongue speakers (Chart 1).

Second language learners impact endangered Aboriginal languages

Over the 20-year period from 1981 to 2001, most Aboriginal languages, whether considered *viable* or *endangered*, experienced long-term declines in their continuity (see "What you should know about this study" for definitions). And not surprisingly, the endangered ones suffered the most. Among endangered British Columbia languages like Haida and Tlingit, for example, continuity levels declined to practically nil by 2001; indeed,

Table 1 Young Aboriginal language speakers are increasingly likely to acquire their language as a second language rather than as a mother tongue

	Total population in 2001 with...			% of all speakers who are second language speakers				
	Ability to speak	Second language	Index of second language acquisition ¹	All ages	Under 25	Age 25-44	Age 45-64	Age 65+
Total Aboriginal languages	239,620	47,155	120	20	23	20	16	12
Algonquian Family								
Cree	97,230	20,160	121	21	25	20	16	14
Ojibway	30,505	7,960	130	26	40	27	18	11
Montagnais-Naskapi	10,470	605	106	6	5	6	6	3
Micmac	8,955	1,740	117	19	26	19	10	9
Oji-Cree	10,475	680	106	6	9	5	2	2
Attikamekw	4,955	210	105	4	6	3	1	0
Blackfoot	4,495	1,600	149	36	74	38	17	8
Algonquin	2,425	585	130	24	31	22	18	10
Malecite	1,095	415	133	38	46	53	25	13
Algonquian n.i.e. (includes Michif)	995	415	154	42	70	48	35	22
Inuktitut	32,775	3,445	110	11	11	10	11	9
Athapaskan Family								
Dene	10,585	985	110	9	11	8	7	4
South Slave	2,205	695	151	32	54	31	19	10
Dogrib	2,285	355	119	16	23	9	11	6
Carrier	2,055	750	142	36	68	49	21	13
Chipewyan	940	270	144	29	64	29	19	17
Athapaskan, n.i.e.	1,690	615	140	36	58	41	25	13
Chilcotin	1,145	220	113	19	42	16	7	0
Kutchin-Gwich'in (Loucheux)	500	180	137	36	73	53	24	21
North Slave (Hare)	1,030	165	119	16	27	17	6	8
Dakota/Sioux Family	4,955	815	115	16	20	16	14	8
Salish Family								
Salish, n.i.e.	3,020	1,565	157	52	83	65	30	22
Shuswap	1,255	590	154	47	71	59	24	23
Thompson(Ntlakapamux)	720	315	152	44	85	61	30	16
Tsimshian Family								
Gitksan	1,320	370	132	28	77	33	14	10
Nishga	915	430	153	47	86	70	35	4
Tsimshian	505	160	117	32	0	46	38	20
Wakashan Family								
Wakashan, n.i.e.	1,270	450	130	35	80	48	26	13
Nootka	505	160	109	32	79	64	13	13
Iroquoian Family								
Mohawk	755	405	178	54	80	48	38	18
Iroquoian, n.i.e.	250	105	102	42	50	40	40	25
Haida Isolate	270	145	164	54	78	71	38	29
Kutenai Isolate	220	90	129	41	67	55	7	29
Tlingit Isolate	230	130	219	57	83	77	42	11
Aboriginal languages, n.i.e.	1,400	740	159	53	61	61	51	31

1. See "What you should know about this study" for concepts and definitions.

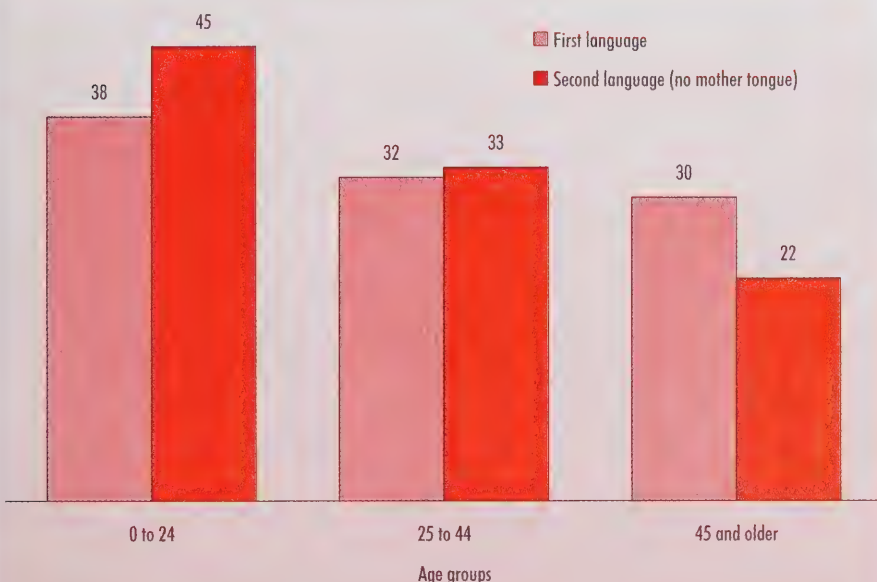
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Notes: For total Aboriginal languages combined, Index of Second Language Acquisition is based on total number of responses, since some respondents are able to speak more than one Aboriginal language. Due to incomplete enumeration of reserves, special caution should be exercised when using data for the Iroquoian family of languages.

Source: Statistics Canada, 1996 and 2001 Censuses of Population.

Chart 1 Second language learners tend to be much younger than the people who learned an Aboriginal language as their mother tongue

% of speaking population



Source: Statistics Canada, 2001 Census of Population.

each of these languages currently has fewer than 200 first language speakers. At the same time, while the more viable languages like Inuktitut have retained their linguistic vitality, several larger viable languages like Cree and Ojibway saw steady long-term declines in continuity over the two decades.

Depending on the state of a given language – that is, whether it is viable or endangered – a number of different growth patterns were observed between 1996 and 2001. In particular, younger generations of Aboriginal language speakers are increasingly likely to acquire their language, especially if it is endangered, as a second language rather than as a mother tongue. For example, the Tlingit language family has one of the oldest mother tongue populations, but the index of second language acquisition and average age of speakers indicates that two people (usually younger) speak the language to every one person with a mother tongue. These indicators

suggest that younger generations are more likely to learn Tlingit as a second language.

Generally, among most endangered languages, there is an overall decline in the ability to speak the language because any gains in second language speakers are not sufficiently large enough to offset the losses of mother tongue speakers. However, for some endangered Aboriginal languages, it appears that the speaker population may be growing due to a concerted effort to learn them as a second language.

This appears to be the case of the smaller Salish languages, which experienced a 5% drop in mother tongue population from 1996 to 2001, while simultaneously posting an impressive 17% increase in total number of speakers. At the same time, the average age of all Salish speakers was notably younger at 42 years of age, compared to 50 years for the mother tongue population. (Table 2)

This pattern also applies to a number of viable languages in which second language speakers appear to be adding to the total number of speakers. Languages experiencing these growth patterns between 1996 and 2001 include Attikamek, with a 21% increase in population able to speak the language compared to a 19% growth in its mother tongue population. Similarly, the number of people able to speak Dene increased 11%, while its mother tongue population increased only 7%. Other languages with higher gains in ability to speak compared to gains as a mother tongue include Micmac, Dakota/Sioux, Montagnais/Naskapi, and Inuktitut.

In fact, among some of the most endangered languages, second language speakers account for over half of the speaking population. In 2001, for example, 57% of those who spoke Tlingit as well as 54% of those who spoke Haida and 52% who spoke some of the smaller Salish languages were second language learners. Similarly, among practically all of the endangered languages, as well as many languages considered to be “not quite viable, approaching endangered” or “uncertain”, a minimum of a third of all speakers are second language speakers. These included the smaller Algonquin languages, Malecite, Blackfoot, Carrier, Tsimshian, Kutenai, Nishga, and Shuswap.

It also appears that young people make up a substantial share of Aboriginal second language speakers among endangered languages. In 2001, for example, among children under age 15 who could speak an endangered language, 71% learned it as a second language (Chart 2).

In contrast, the prevalence of second language speakers declines with increasing age among both endangered and viable-language speakers, a pattern that is not surprising since older generations of Aboriginal peoples are more likely to have an Aboriginal mother tongue. Among speakers aged 65 years and

Table 2 For some Aboriginal languages, gains in second language speakers may be offsetting the decline in mother tongue populations

	Mother Tongue	Continuity Index ¹	Ability Index ¹	% change 1996 to 2001 for languages with over 2,000 speakers		Viability status ¹ in 1996 and 2001
				Mother tongue	Ability	
Total Aboriginal languages	203,300	64	120	-3.3	-0.6	
Algonquian Family	142,090	62	120			mostly viable
Cree	80,075	62	121	-6.2	-3.1	viable large
Ojibway	23,520	45	130	-10.1	-6.0	viable large
Montagnais-Naskapi	9,890	91	106	8.0	10.2	viable small
Micmac	7,650	65	117	2.3	8.2	viable small
Oji-Cree	9,875	73	106	4.1	2.4	viable small
Attikamek	4,725	95	105	18.6	21.1	viable small
Blackfoot	3,025	56	149	-27.1	-20.2	viable small / uncertain
Algonquin	1,860	30	130	-12.6	-8.4	viable small / uncertain
Malecite	825	33	133			viable small / uncertain
Algonquian, n.i.e. (includes Michif)	645	19	154			uncertain
Inuktitut	29,695	82	110	7.5	8.7	viable large
Athapaskan Family	18,530	63	121			mostly viable
Dene	9,595	81	110	6.8	10.8	viable small
South Slave	1,460	39	151			viable small / uncertain
Dogrib	1,925	70	119	-7.7	-6.8	viable small
Carrier	1,445	34	142	-34.8	-29.3	viable small / uncertain
Chipewyan	655	27	144			viable small / uncertain
Athapaskan, n.i.e.	1,210	22	140			uncertain
Chilcotin	1,010	53	113			viable small
Kutchin-Gwich'in (Loucheux)	365	15	137			endangered
North Slave (Hare)	865	55	119			endangered
(Dakota)Siouan Family	4,310	66	115	0.2	3.5	viable small
Salish Family	3,210	20	156			endangered
Salish, n.i.e.	1,920	21	157	-5.2	17.1	endangered
Shuswap	815	19	154			endangered
Thompson	475	18	151			endangered
Tsimshian Family	2,030	26	135			mostly endangered
Gitksan	1,000	31	132			viable small / uncertain
Nishga	600	23	153			endangered
Tsimshian	430	21	117			endangered
Wakashan Family	1,445	14	123			endangered
Wakashan	980	18	130			endangered
Nootka	465	6	109			endangered
Iroquoian Family	670	8	150			uncertain
Mohawk	425	8	178			uncertain
Iroquoian, n.i.e.	245	8	102			uncertain
Haida Isolate	165	6	164			endangered
Kutenai Isolate	170	29	129			endangered
Tlingit Isolate	105	5	219			endangered
Aboriginal languages, n.i.e.	880	24	159			endangered

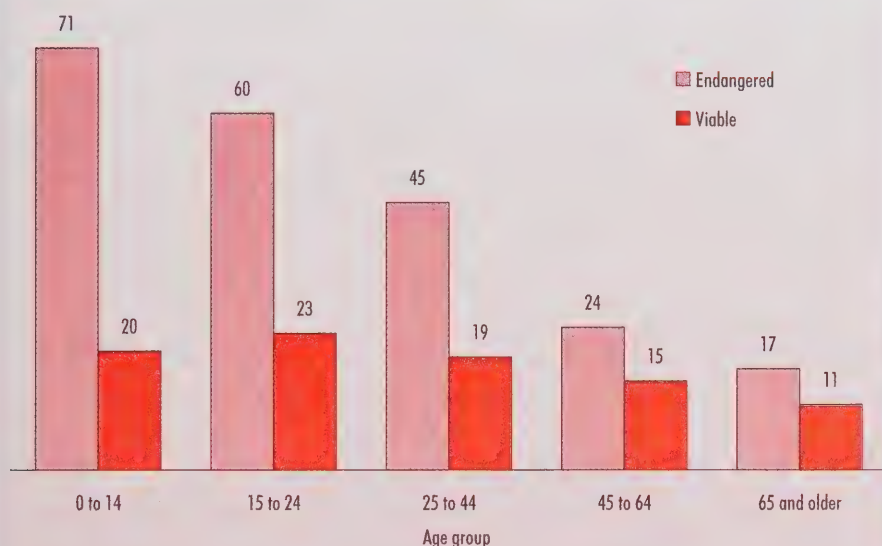
1. See "What you should know about this study" for concepts and definitions.

n.i.e. Not included elsewhere.

Notes: The indices are based on combined single and multiple responses for mother tongue and home language. Due to incomplete enumeration of reserves, special caution should be exercised when using data for the Iroquoian family of languages. Changes in coding procedures between 1996 and 2001 means that counts for North Slave and South Slave (Athapaskan family) are not comparable between censuses. Percentage changes calculated using data adjusted for differences in enumeration and reporting patterns in 1996 and 2001, particularly affecting Cree, Ojibway and Oji-Cree.

Source: Statistics Canada, 1996 and 2001 Censuses of Population. Catalogue 9660030XIE2001007, and Norris, "Aboriginal Languages in Canada," Canadian Social Trends No. 51 (Winter 1998).

% of speaking population who are second language learners



Note: See "What you should know about this study" for definitions of endangered and viable languages.

Source: Statistics Canada, 2001 Census of Population.

older, the share of second language speakers drops to just 17% of those speaking an endangered language, and 11% of those speaking a viable language.

However, for some of the most endangered languages, high shares of second language speakers do not always imply younger speakers. In fact, populations of second language speakers are also aging along with mother tongue populations. For example, in 2001 virtually none of the 500 people who could speak Tsimshian were under the age of 25, even though 32% were second language speakers.

Both on- and off-reserve, second language learners are making gains

Interestingly, it also appears that younger generations living off-reserve, and especially those in urban areas, are increasingly likely to learn an Aboriginal language as a second language rather than as a mother tongue. Among Registered Indians

off reserve, 165 children aged 10 to 14 are able to speak a First Nation language for every 100 children with a First Nation mother tongue.⁵ This suggests that a substantial number of children learn their traditional language as a second language.

Of course, the issue is even more salient in Aboriginal communities (that is, reserves, Inuit communities and settlements). In 1996, about two-thirds of comparable communities reported that most Aboriginal speakers had learned the language as their mother tongue; by 2001, the proportion had dropped to less than half. In contrast, the number of communities where many speakers had acquired it as their second language doubled from 8.5% to 17%. All told, about 33% of communities enumerated in 2001 could be classified as being in transition from a mother tongue to a second language population.⁶

Naturally, families impact the transmission of an Aboriginal language from parent to child,

be it as a mother tongue or as a second language. The vast majority of Aboriginal children aged 5 to 14 (over 90%) can converse in their parent's or parents' language, with many having learned it as a second language. Children most likely to learn an Aboriginal language as a second language are from linguistically mixed families, live in urban areas, or speak an endangered language.⁷ For example, while 70% of children with Salish language parentage could speak their parent(s)' language, only about 10 percent had acquired it as a mother tongue.⁸

Learning Aboriginal language is important to most parents

Recent trends in the acquisition of Aboriginal languages as second languages point to an increased recognition that speaking an Aboriginal language is important. According to the 2001 Aboriginal Peoples Survey, parents of 60% of Aboriginal children in non-reserve areas believed it was very important or somewhat important for their children to speak and understand an Aboriginal language.

Parents are not alone in thinking that learning an Aboriginal language is important. Both Aboriginal adults and youth, including those in non-reserve areas, share the same opinion. For example, among the off-reserve population in Saskatchewan, 65% of Aboriginal adults and 63% of Aboriginal youth aged 15 to 24 thought that learning, relearning, or maintaining their language was "somewhat important" or "very important". Similarly, in the Yukon, language learning was considered important by even higher proportions of Aboriginal adults and youth (78% and 76%, respectively).⁹

The attitudes of youth are critical to the future of languages, particularly as parents of the next generation. Furthermore, unlike older generations, Aboriginal youth today have to contend with the prevailing influence of English and French through the mass media, popular culture, and

This study is based mainly on 1996 and 2001 Census of Population data. The study population covers those individuals who self-identified as Aboriginal on the census. Some caution is required in comparing Aboriginal populations between censuses, due to ethnic mobility and fluidity in self-identity among the Aboriginal population. Also, intercensal comparisons of Aboriginal language data can be affected by differentials in coverage, incomplete enumeration, reporting, content and questions, which have been controlled for where feasible.

Aboriginal language speaker: The ability to speak and to converse in an Aboriginal language. Although respondents were instructed to report only those languages in which they can carry on a conversation of some length on various topics, ability is based on the respondent's own assessment. Since varying degrees of fluency may be represented in the data, it is suggested that some caution be exercised in considering the implications of second language acquisition for transmission and continuity.

Mother tongue/first language speaker: Mother tongue refers to the first language learned at home in childhood and still understood by the individual. First language speakers are those persons with an Aboriginal mother tongue who report the ability to speak an Aboriginal language. In a small percentage of cases (5%, or 11,000, in 2001), respondents with an Aboriginal mother tongue did not report that they could speak an Aboriginal language. Although the Aboriginal mother tongue population and first language speakers are not strictly equivalent concepts, the two terms are used interchangeably in this article.

Second language speakers: For purposes of this study, these individuals are defined as persons who report the ability to speak an Aboriginal language, but who do not have an Aboriginal mother tongue.

Home language: In this study, home language refers to the language spoken most often at home by the individual. In the 2001 Census, a new section on languages spoken on a regular basis at home was added. (Because of changes in the question, the 2001 "spoken most often" measure may not be directly comparable to previous censuses.)

Index of ability/Index of second language acquisition: compares the number of people who report being able to speak the language with the number who have that Aboriginal

language as a mother tongue. If, for every 100 people with a specific Aboriginal mother tongue, more than 100 persons in the overall population have the ability to speak that language, then some have learned it as a second language.

N.B.: As indirect estimates of second language acquisition, the index of second language acquisition and the estimated intercensal growth in the numbers of second language speakers assume that all persons with an Aboriginal mother tongue also reported the ability to speak an Aboriginal language. As such they serve only as indicators, not as precise measures.

Index of continuity: measures the number of people who speak the language at home for every 100 persons who speak it as their mother tongue.

Viability of Aboriginal languages

Aboriginal languages differ significantly in their state, and in their trends and outlook, and as such they can be classified accordingly. On the basis of a classification by Kinkade,¹ they can be divided into five groupings: already extinct; near extinction; endangered; viable but with a small population base; and viable with a large population.

Near extinction: These languages may be beyond the possibility of revival. As only a few elderly people speak them, there may only be enough time to record and archive them.

Endangered: These languages are spoken by enough people to make survival a possibility, given sufficient community interest and concerted educational programs. They tend to have small populations, older speakers, and lower rates of language transmission. Many of the smaller languages, often with far fewer than 1,000 persons, have very low prospects for on-going transmission across generations. This is particularly relevant to the situation in British Columbia where many of the languages found there have very low prospects for continuity and are either endangered (e.g. Nishga, Haida) or near extinction.

Viable but small: These languages have generally more than 1,000 speakers and are spoken in isolated or well-organized communities with strong self-awareness. In these communities, language is considered one of the important marks of identity. They can be considered viable if their continuity is high and they have relatively young speakers, for example, Attikamek and Dene.

Viable large: These languages have a large enough population base that long-term survival is likely assured. Cree, Inuktitut and Ojibway are the only viable languages with large population bases. Large or small, viable languages tend to have relatively young speakers, compared to endangered languages. Census data are available for viable and endangered languages but are not available separately

for languages near extinction owing to their small numbers of speakers.

1. Kinkade, M.D. 1991. "The Decline of Native Languages in Canada" in *Endangered Languages*. Eds. Robert H. Robins and Eugenius M. Uhlenbeck. Published with the Authority of the Permanent International Committee of Linguists (PICL). Canada: Berg Publishers Limited.

other aspects of their daily lives such as education and work. At the same time, their traditional language can serve a different role than that of mainstream languages: it can be a means to "...express the identity of the speakers of a community ... fostering family ties, maintaining social relationships, preserving historical links..."¹⁰ An in-depth study about the values and attitudes of Inuit youth concerning Inuktitut and English found that most young Inuit, even those who thought that they were "good" or "excellent" at speaking Inuktitut, expressed concern that as they use and hear English more frequently, they are losing their ability to speak Inuktitut well.¹¹ Many also report speaking English more than when they were children. At the same time, many youth associate Inuktitut with their identity, traditional knowledge, and culture; for some, losing Inuktitut can affect their sense of belonging, leading to feelings of marginalization and exclusion. While youth are making a concerted effort to use Inuktitut in daily activities, they also identify a need for support through family, community and education, with opportunities to learn, hear and use it.

Summary

Although most Aboriginal language speakers learned their language as a mother tongue, many factors contribute to the erosion of intergenerational transmission of Aboriginal languages, including increasing migration between Aboriginal communities and cities, and to and from reserves; linguistic intermarriage; the prevailing influence of English and French in daily life; and the legacy of the residential school system.¹² Furthermore, for most Aboriginal children, the "ideal" conditions for acquiring an Aboriginal mother tongue – with both parents having an Aboriginal mother tongue, and residing in an Aboriginal community – are not always feasible.

These pressures and demographics increase the likelihood that a significant share of the next generation of Aboriginal language speakers will be second language learners. Most importantly, though, it will be the desire and interest in learning Aboriginal languages today that will help shape the growth of future generations of Aboriginal language speakers, both first and second language learners.


Mary Jane Norris is a senior research manager with the Research and Analysis Directorate, Indian and Northern Affairs Canada.

1. Data for 2001 are the most recent available at the time of publication. Language data from the 2006 Census of Population will be released in December 2007.
2. Part of this decrease over the period 1996 to 2001 is also attributable to the increased tendency of people to identify themselves as Aboriginal. This is especially the case among persons of Métis heritage, only a small proportion of whom report being able to speak an Aboriginal language. See Statistics Canada, 2003. *Aboriginal Peoples of Canada: A demographic profile, 2001 Census. Analysis Series, 2001 Census*. Catalogue no. 96F0030XIE2001007.
3. See Report of the Royal Commission on Aboriginal Peoples (1996), *Gathering Strength* (Vol. 3) and *Perspectives and Realities* (Vol. 4). Ottawa: Minister of Supply and Services Canada.
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Time escapes me: Workaholics and time perception

by Leslie-Anne Keown

Work is more fun than fun – Noel Coward

Work, regardless of how we define it and whether we are paid for it or not, is a core element of our lives. It adds structure to our waking hours – we have somewhere to be, something to do – and it gives us a sense of identity in the larger world outside the personal circle of family and friends. However, there are some people for whom we think work occupies an even more central place in their lives. And if we think the importance they give their work has become exaggerated, we often call these individuals workaholics.

Workaholics are a stereotype of modern life, and they are both praised and criticized. On the one hand, working to the exclusion of all else may be seen as an asset in the corporate world, and in some professions it may be the accepted way of earning promotion. On the other hand, workaholics may be viewed as neglecting aspects of life such as family and leisure that are important for maintaining a healthy equilibrium.

But perhaps more important in any discussion of workaholics is how they perceive themselves. Being a workaholic – over-dedicated and perhaps overwhelmed by their jobs – is part of their identity. The perceived demands of the job has

become the lens through which they view all their other priorities and the time available to fulfill them.

Using data from 2005 General Social Survey on time use, this article looks at those who identify themselves as workaholics and asks if this self-identification affects their quality of life as measured by the balance between work and family time, time pressure and general life satisfaction.

Almost one-third of working Canadians say they are workaholics

Almost one-third of employed Canadians aged 19 to 64 (31%) identify themselves as workaholics. This percentage has not changed since the General Social Survey (GSS) first began collecting these data in 1992.

Since they are so numerous, it is not surprising that real workaholics don't match the pop culture presentation of workaholics as an elite group of high octane over-achievers. They are no more likely than non-workaholics to be young, highly educated, city dwellers or high-income earners (Table 1). With so little actual socio-demographic difference between workaholics and non-workaholics, we must search somewhere else to find the

distinguishing characteristics that separate the two groups.

Workaholics have a different work profile

Although the popular picture of a workaholic may be one of the high-profile professional, this profile appears to be somewhat inaccurate. Only two broad occupational categories showed a higher percentage of self-reported workaholics than the average – management and trades. Professionals and people in technical and clerical occupations had a significantly lower percentage of those who identify as workaholics among their ranks.

The lower level of workaholics amongst those in a professional occupation is somewhat puzzling. Why would managers be workaholics and professionals not be? Perhaps professionals, such as doctors and lawyers, accept that working longer hours are an integral part of their professional role, whereas managers view these conditions as uncompensated but necessary conditions of their position. As for the higher incidence of workaholics in the trades, an over-abundance of work, coupled with a labour shortage in the skilled trades, might be a contributing factor to this phenomenon.

Table 1 The occupational profile of workaholics and non-workaholics differs but other demographic differences are not evident

	Non-workaholics	Workaholics
Average age	40.7	39.8
	(% distribution across)	
Male	56	59*
Female	44	41*
Education		
High school diploma or less	29	27
College diploma/some postsecondary	45	45
University degree	26	28
Marital status		
Married/Common-law	69	67
Other	31	33
Household structure		
Alone	11	11
Couple only	24	23
Couple and children	39	40
Single parent and children	6	6
Other	20	20
Live in a census metropolitan area		
No	33	33
Yes	67	67
Personal income		
Less than \$30,000	28	26
\$30,000 to \$60,000	45	45
More than \$60,000	27	29
Occupation		
Management	8	12*
Professional	21	18*
Technical	8	6*
Clerical	17	12*
Sales and service	23	24
Trades	13	17*
Industry	10	11

* Significant differences between workaholics and non-workaholics at $p < .05$.

Source: Statistics Canada, General Social Survey, 2005.

Workaholics do not enjoy work more but they are less satisfied with life

The perception of the workaholic as always working does distinguish workaholics from non-workaholics (Chart 1). Workaholics were twice as likely to report they usually worked 50 or more hours per week, at 39% compared with 20% for non-workaholics.

However, they found no more pleasure and satisfaction in their work than non-workaholics. According

to the 2005 GSS, self-reported workaholics did not report that they enjoyed work more than non-workaholics (Table 2). Nor were they more satisfied with their jobs than other workers. This finding does contradict the results of some previous research.¹

On the other hand, a key difference between workaholics and non-workaholics is that workaholics are more likely to say that their work and home lives were out of kilter. One-third of workaholics reported

that they were dissatisfied with their work-life balance, compared to about one-fifth of non-workaholics.

This perceived imbalance between the demands of home and work reflects itself in related areas. A much higher percentage of workaholics than non-workaholics report worrying that they do not spend enough time with friends and family, and that they feel under stress to accomplish more than they can handle.

A sense of disequilibrium is echoed in other aspects of the workaholic's life. People who self-identified as workaholics are more likely to report that they have fair or poor health than non-workaholics. A higher percentage also have trouble going to or staying asleep, perhaps because they are more likely to cut back on sleep when they do not have enough time to finish their other goals during the day.

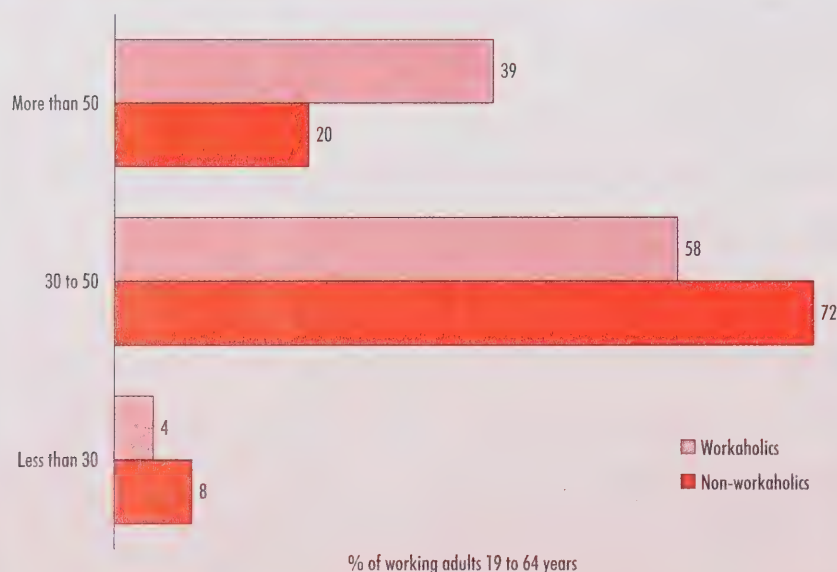
Not only do workaholics report more negative health effects than non-workaholics, they also indicate lower levels of satisfaction with their life overall. Workaholics are also more likely to report being unsatisfied with the way they spend their non-work time, implying that they know this aspect of their lives could be improved.

Interestingly, workaholics are not different than non-workaholics in terms of their satisfaction with their financial situation. This suggests that the drive to work as they do may arise from some other factor than the need to earn more income.

Workaholics see time slipping through their fingers

The differences between people who see themselves as workaholics and those who do not carry over into their perceptions of time pressures. Overall, workaholics appear to find the unsatisfactory way that time is divided between the priorities in their lives is a source of concern; specifically, they seem to believe that the way they spend their time is somehow beyond their control (Table 3).

Usual hours worked per week



Source: Statistics Canada, General Social Survey, 2005.

A higher proportion of workaholics report that they usually feel rushed trying to get through the day (86% versus 73% of non-workaholics). Over half indicate that they feel trapped in a daily routine. More workaholics than non-workaholics feel that they do not accomplish what they set out to do at the beginning of the day (56% versus 44%). Over one-third of workaholics would like to spend more time alone.

Workaholics seem to recognize that they have a problem using their time effectively. With 56% of workaholics saying they feel they do not have time for fun anymore (much higher than the one-third of non-workaholics), many plan to change their ways. One-third of workaholics reported that they plan to slow down in the coming year, compared to one-fifth of non-workaholics. Whether or not they will be successful in gaining more control over their time is not known.

	Overall	Non-workaholics	Workaholics
Average level of satisfaction with...			
		(Maximum = 10.0)	
Life overall	7.7	7.8	7.5*
Non-work time	7.1	7.3	6.6*
Finances	6.6	6.6	6.5
Work	7.4	7.4	7.4
Average level of enjoyment of work			
	3.8	3.8	3.9
Satisfied with work-life balance			
		(% distribution downward)	
No	24	19	34*
Yes	76	81	66*
Self-rated health			
Fair/Poor	10	9	12*
Good/Excellent	90	91	88*
Experience trouble going to or staying asleep			
No	72	74	66*
Yes	28	26	34*
Cut back on sleep when you do not have enough time			
No	45	50	35*
Yes	55	50	65*
Feel under stress to accomplish more than you can handle			
No	59	67	42*
Yes	41	33	58*
Worry that you do not spend enough time with family or friends			
No	49	55	35*
Yes	51	45	65*

* Significant differences between workaholics and non-workaholics at $p < .05$.

Source: Statistics Canada, General Social Survey, 2005.

Table 3 Workaholics and non-workaholics differ in their perception of time and workaholics feel more stressed about time

	Overall	Non-workaholics	Workaholics
	(% distribution downward)		
Feel rushed			
Usually	77	73	86*
Occasionally	20	23	12*
Never	3	3	2
Feel under stress when you do not have enough time			
No	38	42	29*
Yes	62	58	71*
Feel trapped in a daily routine			
No	57	61	48*
Yes	43	39	52*
Feel you do not have time for fun anymore			
No	59	66	44*
Yes	41	34	56*
Would like to spend more time alone			
No	70	73	65*
Yes	30	27	35*
Feel like you have not accomplished what you set out to do			
No	52	56	44*
Yes	48	44	56*
Plan to slow down in the coming year			
No	76	80	68*
Yes	24	20	32*

* Significant differences between workaholics and non-workaholics at $p < .05$.

Source: Statistics Canada, General Social Survey, 2005.

But given that being a workaholic is now part of their identity, we might guess this is an elusive goal.

Summary

Almost one-third of working adults perceive themselves as workaholics. Yet discovering what differentiates the workaholic from the non-workaholic is more difficult than it may first appear. Workaholics and non-workaholics do not differ from each other in any socio-demographic way. Workaholics work more hours and have a slightly different occupational profile than non-workaholics, but this is not the distinguishing characteristic between the two groups.

Rather, self-reported workaholics and non-workaholics have distinctively different ways in which they view their time and the way they allocate

that time to their various priorities. Time appears to slip through the workaholic's fingers. They devote more effort to work, but they derive no more satisfaction or pleasure from it than do non-workaholics. They are dissatisfied with their work-life balance and wish they could spend more time with family and friends. Alternatively, they would like to spend more time alone. Perceived lack of time is a bigger stressor in their everyday lives than it is for non-workaholics. It leaves them feeling rushed, trapped in their daily routines and unable to finish everything they think needs to be done. Overall, time seems to escape them.

CST
Leslie-Anne Keown is an analyst with *Canadian Social Trends*.

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Data used in this article come from the 2005 General Social Survey on time use, which interviewed Canadians aged 15 and over living in the ten provinces. This study is focused on adults 19 to 64 years old whose main activity during the year was working. The target population is based on approximately 9,700 respondents and represents over 13.4 million Canadians.

Workaholic: All respondents who answered "Yes" to the question "Do you consider yourself a workaholic?" This self-identification is based purely on the respondent's perception of time, and not on the actual number of hours they work.

The term "workaholic" is used in the popular literature more than in the field of psychology, where the term "work dependency" is often preferred. The word itself came into use in the 1970s and has become an enduring term in common language. Previous research has suggested that about 1 in 4 individuals perceive themselves as workaholics,¹ and a number of different subtypes have been identified in the

academic literature.² Depending on their responses to screening questions, workaholics may be classified as anything from a "work enthusiast" to an "unengaged worker."³

For further information on classification of subtypes of workaholics, and on the concept as a whole, see J. Spence and A. Robbins, 1992. "Workaholism: Definition, measurement, and preliminary results." *Journal of Personality Assessment*. Vol. 58, no.1. p.160-178.

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Canadians and their non-voting political activity

by Leslie-Anne Keown

The job of a citizen is to keep his mouth open – Günter Grass

One in three non-retired 19- to 64-year-olds was politically active in 2003. They searched for political information, volunteered for a political party, joined a political party, and/or wrote a newspaper or politician to express their views. These forms of non-voting participation in the democratic process are often examined to assess the health of a democracy and the civic engagement of its citizens.

Researchers argue that the factors which influence whether or not an individual will participate in the political arena can be classified into four main categories: socio-demographic characteristics such as age and education; attitudes towards the extent of perception of control over life chances (mastery); direct experiences with the democratic and political process as a youth (often called political socialization); and whether one actively follows news and what medium is used to do so.

This article uses the 2003 General Social Survey to consider what factors influence Canadians to take part in non-voting political activity. In order to identify the relative importance of these different factors on the probability of engaging in this type of political activity, a multivariate statistical analysis was conducted.

This analysis allows the unique contribution of each factor on the likelihood of participating to be identified. Only non-retired Canadians between the ages of 19 and 64 were included in the study.

Most common form of non-voting political activity is searching for information

This article considers four forms of non-voting political participation. These include searching for political information, volunteering for a political party, joining a political party, and/or writing to a newspaper or politician to express one's views. Overall, one in three Canadians engaged in at least one of these four activities (Chart 1). The most common activity was searching for political information. Volunteering for a political party or being a member of a political party were less common, perhaps because these kinds of activities are more common when nominations for candidates are underway or an actual election is being held.

Younger adults and men are more likely to participate in the political domain

Several socio-demographic characteristics have a significant impact on whether or not someone is more likely

than another person to participate in the political arena. Age is important, once other factors in the model are held constant (Table 1). Younger adults aged 19 to 24 were 1.2 times more likely to engage in non-voting activity than older Canadians aged 45 to 64.¹ Those aged 25 to 44 were the least likely to participate, with their odds of involvement being 1.3 times lower. This finding is somewhat different than results of other researchers and may simply reflect the choice of activities being considered in this study.²

Gender was also a significant indicator of political involvement among non-retired Canadians aged 19 to 64. Men were 1.5 times more likely to engage in non-voting activities than women. This is not surprising given the higher involvement of men in the formal arena of electoral politics.

The language most commonly spoken at home is also influential. Speaking English produces odds about 1.3 times higher than speaking a language other than English or French. There was no significant difference in the likelihood of non-voting political participation between those who spoke English and those who spoke French, once other factors in the model were controlled for.

Table 1 Education and a history of civic involvement influence participation in political activity

	Odds ratios		Odds ratios
Demographic characteristics		Attendance at religious services	
<i>Women</i>	1.00	<i>Not regular attendee</i>	0.86*
<i>Men</i>	1.49*	<i>Regular attendee</i>	1.00
Age group		Mastery (perceptions of control over life's chances)	
<i>19 to 25 years</i>	1.22*	<i>Low level</i>	0.73*
<i>25 to 44 years</i>	0.76*	<i>Average level</i>	0.76*
<i>45 to 64 years</i>	1.00	<i>High level</i>	1.00
Marital status		News and current affairs information	
<i>Not married</i>	1.00	<i>Regularly follow news and current affairs</i>	
<i>Married (including common-law)</i>	0.96	<i>No</i>	1.00
Household income		<i>Yes</i>	1.75*
<i>Less than \$30,000</i>	1.09	<i>Use only TV to follow news and current affairs</i>	
<i>\$30,000 to \$60,000</i>	1.00	<i>No</i>	1.00
<i>More than \$60,000</i>	1.08	<i>Yes</i>	0.56*
<i>Refused, not stated</i>	0.97	Parental influence	
Place of birth		Father's education	
<i>Born in Canada</i>	1.00	<i>Less than university</i>	1.00
<i>Born outside Canada</i>	0.84	<i>University degree</i>	1.33*
Language of preference		Mother's education	
<i>English</i>	1.00	<i>Less than university</i>	1.00
<i>French</i>	0.91	<i>University degree</i>	1.26*
<i>Other</i>	0.76*	Parents did volunteer work when respondent was in secondary school	
Region of residence		<i>No</i>	1.00
<i>Atlantic</i>	0.84	<i>Yes</i>	1.34*
<i>Quebec</i>	1.01	Political socialization in school	
<i>Ontario</i>	1.00	Respondent belonged to youth group when in secondary school	
<i>Prairies</i>	1.07	<i>No</i>	1.00
<i>B.C.</i>	1.01	<i>Yes</i>	1.21*
Urban/Rural		Respondent participated in student government when in secondary school	
<i>Urban</i>	1.00	<i>No</i>	1.00
<i>Rural</i>	0.91	<i>Yes</i>	1.67*
Level of education			
<i>High school or less</i>	1.00		
<i>Some postsecondary/College diploma</i>	1.89*		
<i>University degree</i>	3.19*		

* Significantly different than reference group shown in italics at $p < .05$.

Source: Statistics Canada, General Social Survey, 2003.

Postsecondary education is the most important influence on participation in the political sphere

However, the most important personal characteristic to influence involvement in non-voting political activity is level of education. Over half (51%) of those with a university education had been active in the political arena in the previous year whereas fewer than one-fifth (18%) of

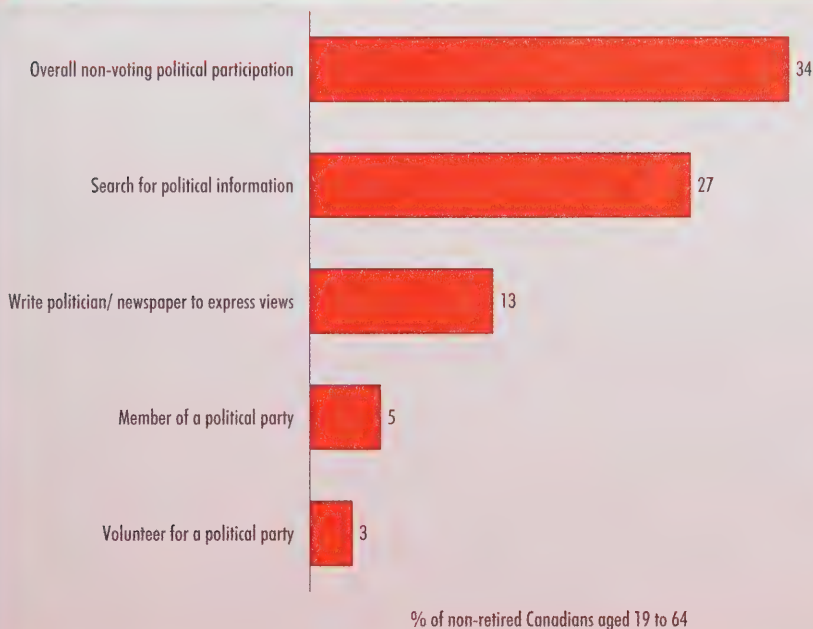
those with no more than high school indicated they had engaged in such activity (Chart 2).

So, after taking account of the effect of other influences, it is not surprising that non-retired 19- to 64-year-olds with some postsecondary education or a college diploma were 1.9 times more likely to engage in political activity than those with a high school education; meanwhile, those with a university degree were

3.2 times more likely to do so. Researchers think that higher levels of education influence the likelihood of political activity because well-educated individuals are assumed to be more familiar with the workings of the democratic system and therefore to be more comfortable operating in the political environment.³

Religious attendance also influenced political activities, with frequent attendees at religious

Chart 1 One in three non-retired Canadians participate in some non-voting political activity



Source: Statistics Canada, General Social Survey, 2003.

services 1.2 times more likely to participate. Previous research has found that regular attendance at religious services both highlights opportunities for political participation as well as providing a place where individuals can connect with their community and help respond to its needs.⁴

Marital status, income, place of birth, region of residence, and living in a rural or urban area were not significant influences on non-voting political behaviour, once other factors were controlled for.

Having a sense of mastery associated with political participation

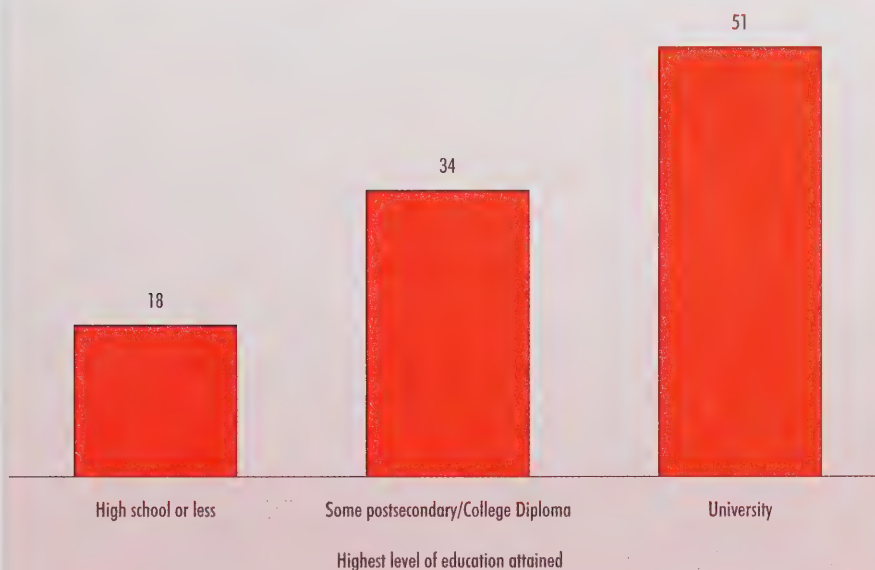
The model results show that sense of mastery – that is, the extent of a person's perception of control over his or her life chances⁵ — is also an important indicator of political activity. A higher level of mastery increases the probability of being involved in the political arena when compared to those with an average or low sense of mastery, even once the influence of education and other factors is controlled for. This is supported by other research which has found that when individuals feel that they can influence certain issues, they are more likely to become involved than when they do not feel the possibilities for change or action are within the realm of their control.⁶

Children follow in their parents' footsteps

The extent of a person's exposure to civic or political activity when they were young – a process called political socialization – influences whether or not they participate in the political arena as an adult.⁷ These youthful experiences include having a parent who participated in community activities. Just as children may follow their parents into the family business or into similar professions, parents lay the groundwork for their children's political participation through their education and volunteering activities.

Chart 2 Postsecondary education encourages participation in the non-voting political arena

% of non-retired Canadians aged 19 to 64



Source: Statistics Canada, General Social Survey, 2003.

The 2003 General Social Survey (GSS) on social engagement surveyed about 25,000 Canadians aged 15 and older living in private households in the 10 provinces. It was developed to explore the measurement of social capital and develop a better understanding of how social networks and norms of trust and reciprocity contribute to individual and social outcomes. For this purpose, the survey collected information on a wide range of activities, such as social contacts with family, friends and neighbours; involvement in organizations, political activities and volunteer work; and the informal care they provide or receive. It also explored the values and attitudes and the level of trust in people and in public institutions. Overall, the survey provided comprehensive information on the many ways that Canadians engage in civic and social life.

The target population is based on a sample of just over 13,000 respondents and represents over 13.5 million non-retired Canadians aged 19 to 64. The reasons for restricting the study population are:

- a) those 19 and older, as people in this age group are most likely to be eligible to fully participate in the political process and to do so voluntarily;
- b) those under the age of 65, as seniors have very different patterns of engagement due to a number of factors such as mobility restrictions and extended leisure time;
- c) individuals who are employed, attending school or engaged in household work or caring for family members (that is, not retired from the workforce), as they are subject to more time constraints than retired persons.

Political participation/participation in the political arena: The four forms of political participation considered in this study are searching for political information, volunteering

for a political party, belonging to a political party, and writing to a newspaper or contacting a politician to express your views. An individual had to report engaging in at least one of these activities to be classified as participating in the political arena.

Forms of participation where the explicitly political nature of the activity could not be determined are not included. These excluded activities are boycotting products or services (which may be done for ethical as well as political reasons) and participating in a march or demonstration. For instance, an individual who took part in a walk to raise funds for breast cancer may have reported that they had participated in a march or demonstration.

Voting is considered by many to be the benchmark measure for political participation and civic engagement. However, since elections are only held periodically, measures that look at more constant forms of political behaviour are often chosen instead. In addition, eligibility to vote could not be determined using the GSS, thereby limiting the usefulness of the voting measure.

Of course, there are many forms of political participation that citizens may engage in that are outside the realm of the questions asked in the General Social Survey. These forms of participation are no less important

Multivariate analysis

The statistical analysis uses odds ratios to identify various characteristics associated with the likelihood of participating in the political arena. The results indicate whether there is a statistically significant relationship between the various characteristics included in the model, while holding the effects of the other variables constant.

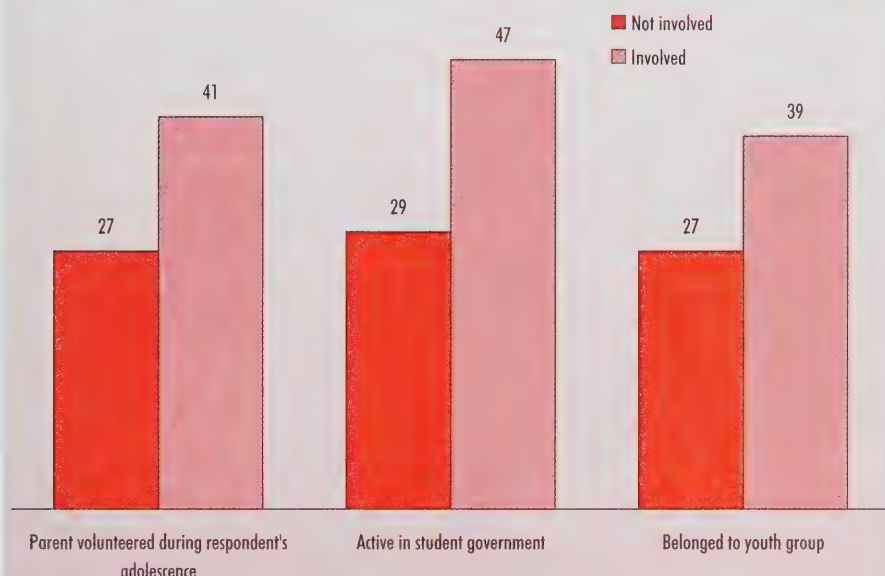
Forty-one percent of Canadians whose parent had been a volunteer participated in the political arena (Chart 3). Controlling for other influences, the model shows that individuals whose parents had volunteered in the community when they were in secondary school were 1.3 times more likely to engage in political activities than individuals whose parents did not volunteer.

Level of parental education was also an important factor. If either parent had a university degree, then the odds of participating in non-voting political activity were approximately 1.3 times greater than if parents had less education. If both parents had a university degree the effect was even greater, with the odds of political participation rising to 1.7. Higher parental education is thought to be important because

the well-educated are more likely to participate in political activities, to follow and to discuss political issues, thus creating opportunities for their children to observe and model such behaviour.⁸

Not only do children tend to follow in their parents' footsteps, but their own experience with extra-curricular activities in secondary school also serve as a form of political socialization that increases

% of non-retired Canadians aged 19 to 64



Source: Statistics Canada, General Social Survey, 2003.

the likelihood of participating in the political arena in later years. Almost half (47%) of those Canadians who participated in student government or belonged to a youth group also engaged in non-voting political activities as an adult.

Controlling for other influences, individuals who participated in youth groups such as Guides, Scouts or 4-H clubs were 1.2 times more likely to take part in at least one form of political engagement as an adult. Additionally, they were 1.7 times more likely to participate if they had been involved in student government. Not only do these findings reflect the importance of political socialization but they also suggest that individuals may self-select to participate in political activities at a relatively young age.⁹

Being plugged into the news increases the likelihood of political involvement

A previous study that also used data from the 2003 General Social Survey

suggested that there is a relationship between Canadians' civic engagement and their habits of following news and current events.¹⁰ This study confirms that finding. Controlling for other factors, Canadians who follow the news on a weekly or daily basis are 1.8 times more likely to participate in the political arena than those who follow the news less frequently. On the other hand, those whose sole source of news information is television were 1.8 times less likely to engage in non-voting political activity than those who included sources such as the newspaper or Internet in their news media consumption.

This result supports previous work which has found that knowledge of current affairs is one of the most important elements influencing involvement in political affairs because knowledge forms the necessary basis on which to predicate action. In addition, the form in which this information is received is important, since television is the news medium that is least likely to

have a motivating influence on future action.¹¹

Summary

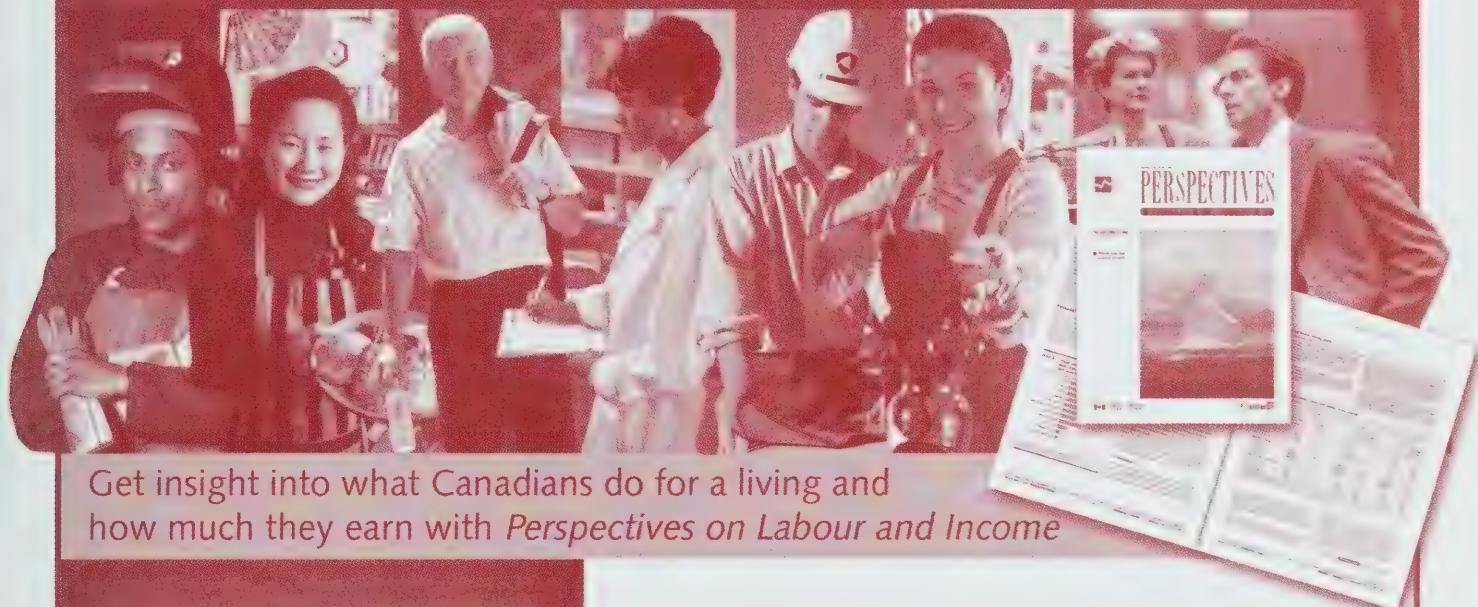
In 2003, about one third of non-retired Canadians between the ages of 19 and 64 participated in political activities. Those with a university degree were much more likely than others to participate. Likewise, knowledge of current affairs and news facilitated involvement, with the source of news playing an important role in whether or not someone took part. A feeling of control over one's life chances (mastery) was also associated with the likelihood of political engagement. Finally, adolescent experiences affected whether a person was likely to be politically active. Having parents with a high level of education and a history of volunteer activity influenced a person's current involvement in non-voting political activities. Similarly, a person's own history with youth groups and student government while in secondary school were significant indicators of non-voting political engagement in adulthood.

Leslie-Anne Keown is an analyst with *Canadian Social Trends*.

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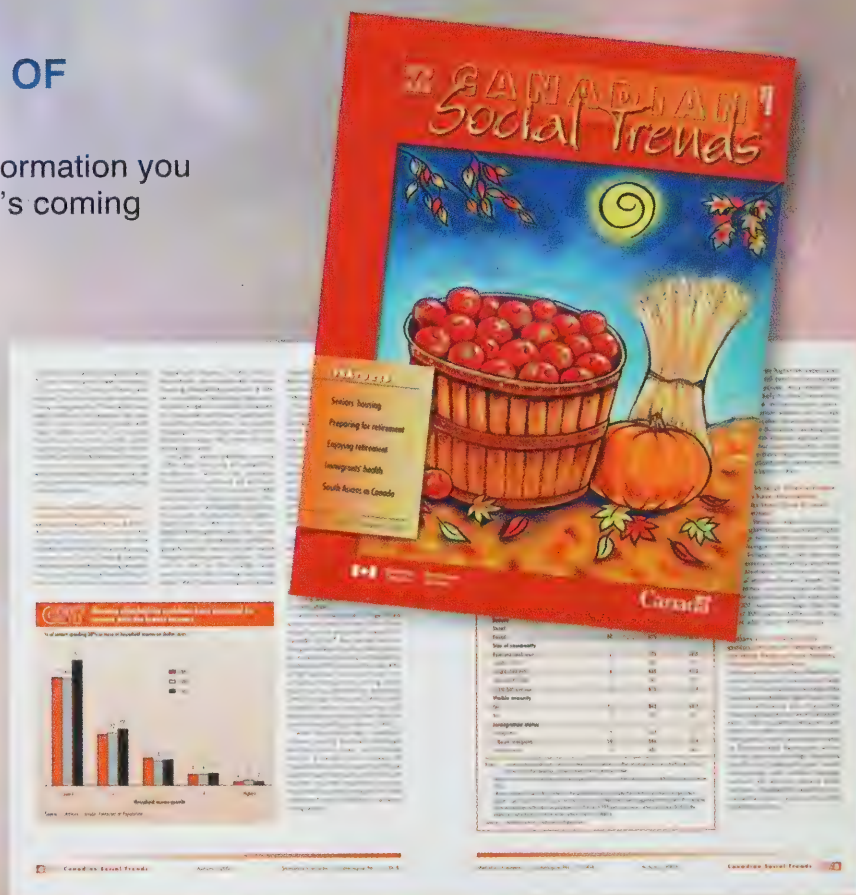
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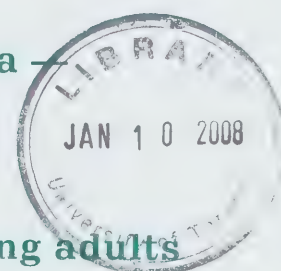
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Re-accreditation and the occupations of immigrant doctors and engineers

by Monica Boyd and Grant Schellenberg

The immigration policies of many countries stress the importance of having highly educated workers able to perform well in their knowledge economies. As such, they favour the admission of professionally trained immigrants. Upon their arrival, however, internationally educated professionals often have difficulty finding employment in their chosen careers.

Canada is no different than many other destination countries in this respect, and for many of the same reasons. New immigrants tend to be unfamiliar with the structure of local and national labour markets; they may not have social networks that could support their job search; they often lack language fluency; and they do not possess Canadian work experience. Professionals often encounter a further obstacle to finding appropriate work in their field of expertise: If they wish to be employed in regulated occupations – such as certain trades, law, engineering, and health – they must be certified and/or licensed through professional associations, which generally operate under government statutes.

The purpose of accreditation is to assure public health and safety. Whereas professionals trained in Canada have followed recognized programs of study, have validated work experience and a high command of the language of employment, immigrant professionals may face difficulties in having their degrees, work experience and/or language proficiency recognized.¹ The collision of national immigration policies with professional accreditation thus creates a paradox: while highly educated immigrants are recruited on the basis of their potential professional contributions to Canadian society, the re-accreditation requirements they must meet often act as barriers to the full utilization of their skills.

In recent years, the media have highlighted the particular difficulty of foreign-trained physicians who are unable to practice medicine in Canada. Foreign-trained engineers are another professional group encountering similar difficulties in practicing their profession. Using data from the 2001 Census of Population, this article documents the extent to which foreign trained physicians and

engineers are not employed in the occupations for which they studied.

The study of medicine versus the practice of medicine

People who seek to practice as physicians in Canada must be licensed by the appropriate regulatory bodies in the provinces. For those who are internationally educated, basic medical knowledge must be evaluated, which in most cases means that they must pass the Medical Council of Canada's Evaluating Examination (MCCEE). This exam assesses the candidate's general medical knowledge in comparison with graduates of Canadian medical schools. A candidate is eligible to write it only if he or she has a medical degree that is listed with the World Health Organization or the International Medical Education Directory.

Passing the MCCEE does not automatically mean that a person is eligible to practice medicine. In most provinces, graduates of foreign medical schools are required to have two years of postgraduate medical training at a Canadian university to practice family medicine and

This study analyzes data from the 2001 Census of Population.¹ The study population is restricted to those individuals who were age 32 to 54 at the time of the Census (May, 2001), and living in private households. The age group is chosen because the period between age 32 and 54 is the core of their productive working life for most people, when they are typically well-established in their careers. The age restriction also removes people who may have retired early. In addition, individuals who were enrolled as students during the eight months preceding the 2001 Census were excluded. This restriction removes people who may not have completed their studies and hence may not yet be qualified to work in their intended profession.

Following procedures used in previous studies², individuals in the study population were grouped into one of three mutually exclusive categories: (1) those born in Canada; (2) those foreign born who immigrated before 19 years of age; and (3) those foreign born who immigrated when they were 28 years of age or older *and* who arrived in Canada before 1997. Individuals in the first two groups are assumed to have received their highest degree in Canada while those in the third group are assumed to have received their highest degrees elsewhere and to have been resident in Canada for at least four years by December 2000. Data for those born abroad but immigrating as children are included in the tables and charts, but for the sake of clarity will not be discussed in the text. They account for 11% of the study population of physicians (3,800 individuals) and 9% of the study population for engineers (11,700 individuals).

Canadian born: Those members of the study population born in Canada and presumed to have received their highest degree from a Canadian institution.

Internationally educated/Foreign trained: Those members of the study population who immigrated as adults (age 28 or older) and are presumed to have received their highest degree from a foreign institution.

Medical doctors/Medical training: Persons who had completed at least six years of university (at least five years of university in Québec), who had completed a medical degree, and whose highest degree was in the field of medicine.

Engineers/Engineering training: Persons who had completed four or more years of university (at least three years of university in Québec), received a bachelor's degree or higher, and whose highest degree was in the field of engineering.

N.B. These criteria describe the minimal expectations and protocols that are applied in Canada to new labour market entrants – both Canadian- and foreign-born – for professional training in medicine and engineering. By omitting from the analysis those who have fewer years of schooling by Canadian standards, and who thus might have additional difficulty in having credentials recognized, we are conducting a conservative test of what happens to foreign-trained professionals in the Canadian labour market.

For the sake of convenience, this article refers to the study population as doctors or engineers, but this does not necessarily mean these individuals have been licensed or accredited to practice their profession in Canada.

Doctors: General Practitioners and family physicians, specialist physicians

Other health occupations: Dentists, veterinarians, optometrists, and other professions and technical occupations related to health care; includes senior managers and managers.

Engineers: Professional engineers, including mechanical, electrical, computer, chemical, civil, mining, aerospace engineers, and so on.

Managerial occupations: Seniors managers and managers. (Engineers are often promoted to management jobs that they obtain because of their engineering credentials; therefore, this occupational category is included as being analogous to working as an engineer.)

Technical occupations: Information systems analysts, computer programmers, engineering/chemical/biological/forestry/geological/ technologists and technicians, inspectors and regulatory officials, and so on.

Unrelated/All other occupations: For physicians, all occupations *not* medical doctor or other health occupations; for engineers, all occupations *not* engineering, managerial or technical occupations.

For a full list of occupations included in each category, please consult the relevant sections of the NOCS2001 classification system.

The model

The central analytical question in this article asks the extent to which internationally educated physicians and engineers are not employed in their chosen profession, compared to those who trained in Canada. Since a variety of factors can have an impact on employment outcomes, we use multivariate

analyses to adjust for the effects of sex composition, age, place of residence, visible minority status, language spoken at home, type of degree and years of university, and field of study. The results are shown as predicted probabilities, which are hypothetical chances out of 100 that an individual would be employed in an occupation, given certain characteristics.

1. Data for 2001 are the most recent at the time of publication. Occupation data will be available from the 2006 Census of Population in March 2008.
2. Boyd, M. 2001. "Asian Engineers in Canada", in *The International Migration of the Highly Skilled: Demand, Supply, and Development Consequences*. W. A. Cornelius and T. J. Espenshade (eds.) La Jolla, California: Center for Comparative Immigration Studies. Boyd, M. and L. Kaida. 2005. "Foreign Trained and Female: The Double Negative at Work in Engineering Occupations." Paper presented at the annual meeting of the Canadian Sociology and Anthropology Association, Learned Societies, London, Ontario, May 30, 2005. Boyd, M. and D. Thomas. 2001. "Match or Mismatch? The Labour Market Performances of Foreign-Born Engineers." *Population Research & Policy Review* 20: 107-133. Boyd, M. and D. Thomas. 2002. "Skilled Immigrant Labour: Country of Origin and the Occupational Locations of Male Engineers." *Canadian Studies in Population* 29(1): 71-99.

four to five years' training for other specialties. In addition, they must pass the appropriate certification examinations of the College of Family Physicians of Canada or the Royal College of Physicians and Surgeons of Canada. Foreign trained immigrants who have studied medicine face barriers to becoming licensed in part because of the small number of residencies available to non-Canadians. Applications from graduates of medical schools outside Canada are processed according to the policies established by each medical institution, but the overall number of applicants who are accepted is small.²

On average, internationally educated doctors have been in Canada about 11 years

According to 2001 census data, there are about 5,400 individuals living in Canada who studied medicine in a foreign institution, arrived at age 28 or older, and are between the ages of 32 and 54. They account for 16% of the potential physicians available that year, that is, the pool of persons who meet the minimal educational requirements to practice medicine in Canada (see "What you should know about this study" for a description of those requirements).

Internationally educated individuals with medical fields of study are about

2.5 years older than the Canadian born; their average age is 45.8 years. They are relatively recent immigrants, having been in Canada about 10.8 years. They are more likely to live in the magnet cities: about half live in Toronto, Montreal or Vancouver, compared with just over one-third of doctors born in Canada. Half are members of visible minority groups, fifteen times the rate for Canadian born doctors. Over one-third were born in Asia and another one-fifth in Africa. Given that they come from such diverse regions of the world, it is not surprising that only about half speak English and/or French most often at home (Table A.1).

The foreign trained who studied medicine have fewer years of university schooling; they averaged 8.3 years of university education in contrast to 9.1 years reported by the Canadian born. While 12% of the foreign trained were not working at the time of the 2001 Census, only 2% of the Canadian born did not have employment.

Nevertheless, the most dramatic differences between the two groups arise when examining the occupations in which they were employed. Fully 90% of the Canadian born who studied medicine are working as physicians. In contrast only 55% of the internationally educated work as doctors; furthermore, 33%

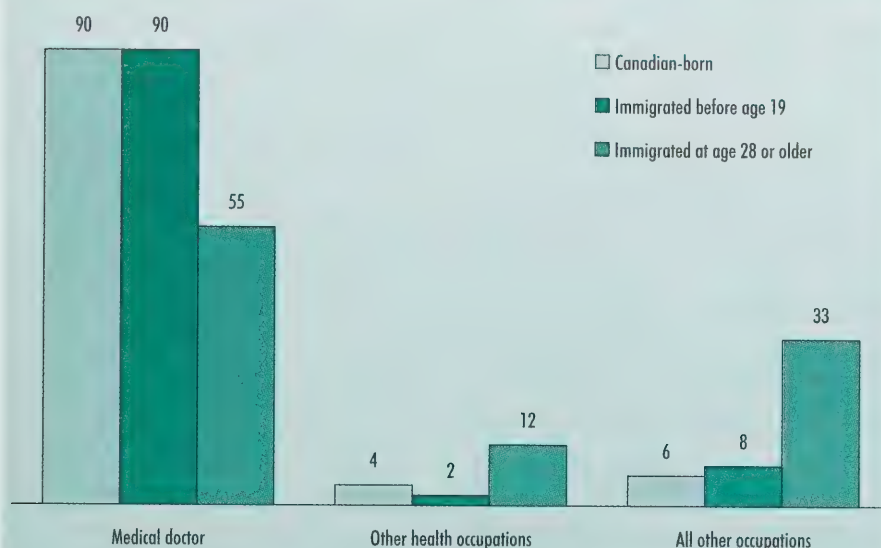
are employed in occupations that are completely unrelated to either medicine or health care in general (Chart 1).

Birthplace has most significant effect on chances of working as a doctor in Canada

As this brief profile clearly shows, internationally educated physicians constitute a highly heterogeneous group of individuals with widely varying characteristics. These characteristics can have a significant effect on the likelihood that a person will or will not find herself employed in her chosen profession.

Age is generally associated with higher status occupations because older workers usually have more labour market experience and this may increase the likelihood of working in one's chosen profession; on the other hand, age discrimination against older workers also may produce negative effects. Place of residence captures the effects of regional and local labour markets; large cities (CMAs) have more extensive knowledge based economies than smaller towns, and probably better employment opportunities. Language spoken at home is a proxy for fluency in Canada's official languages, since the ability to effectively use English or French not only enlarges employment opportunities but also

% of employed persons aged 32 to 54 with medical fields of study



Source: Statistics Canada, 2001 Census of Population.

is a requirement for medical re-certification in Canada.

Among those who immigrated as adults, one would expect that period of arrival and place of birth would be most important in determining whether or not they succeed in finding work as physicians. The reasons for this are easy to understand: Internationally educated doctors born in countries where English or French are spoken or taught intensively (for example, the US, the UK, North and West European countries) should have greater familiarity with Canada's official languages. Similarly, doctors recently arrived in Canada may not yet be eligible to work as physicians because it takes time to complete exams and undertake any new training required for re-accreditation. Finally, the 1990s presented a less favorable labour market to all immigrants than earlier decades, and this may have affected the match between credentials and occupation.

Indeed, a multivariate regression shows that these personal characteristics are significantly associated with

the likelihood that a foreign trained person who studied medicine would actually practice medicine (see "What you should know about this study" for a more complete description of the technique). When all other variables in the model are controlled for, it is clear that those born in some regions have a better chance of finding employment as a physician.

A physician born in Canada, and assumed to have trained in a Canadian institution, would have a 92% predicted probability of working as a doctor. Taking all other variables into account, their internationally educated counterparts born in Africa or South Asia would also have very good chances, estimated at 85% and 87% respectively. In contrast, a foreign trained physician born in other regions of Asia or in Eastern Europe had the lowest hypothetical chances (less than 66 out of 100) of being employed in their chosen profession (Table 1).

The impact of period of arrival is not so markedly associated with the predicted probability of being

employed as a medical doctor. The chances that a foreign trained doctor who arrived before 1980 would work as a physician were very similar to those of a Canadian born person who studied medicine, at 95% and 92%, respectively, when other factors are controlled for. However, the predicted probabilities of finding employment in their preferred profession decline for more recent arrivals. A foreign-trained physician who arrived in the early 1980s would have an 86% predicted probability of working as a doctor, but only a 70% probability if he or she had come in the early 1990s. In general, immigrants arriving in the 1990s and later have experienced greater labour market difficulties than those arriving in previous decades.

Internationally educated engineers are older and better educated

Canada's emphasis on admitting high skilled workers can be seen in the number of foreign trained engineers who have been welcomed to this country. Approximately 34,100 engineers in the study population had immigrated as adults, and they accounted for over one-quarter of trained engineers aged 32 to 54 in Canada (Table A.2).

In order to be licensed as a professional engineer in Canada, a foreign trained person must formally apply to the appropriate provincial or territorial licensing body, pay the required fees, and meet all of its admission requirements. Among these requirements are the successful completion of a technical exam and a professional ethics exam; proof that the applicant has four years' experience, including one year of Canadian work experience; and provision of references from Canadian professional engineers.

Internationally educated engineers are a little more mature than other engineers; with an average age of 44.5, they are almost 3 years older than their Canadian born counterparts. Almost one in five are women, twice the rate for the

Table 1 Foreign-trained doctors who are recent immigrants have much lower hypothetical chances of working as a physician

	Predicted probability of being employed in a health occupation ¹		
	Medical doctors	Other health occupations	All other occupations
Percent (distribution across)			
Canadian-born	92	4	5
Immigrated before age 19	92	2	6
Immigrated at age 28 or older			
<i>Birthplace</i>			
North America, Western Europe and Oceania	79	8	12
Eastern Europe	65	18	17
Caribbean, Central and South America	77	8	15
Africa	85	4	11
South Asia	87	3	10
South East Asia	62	21	17
East Asia	59	18	23
West Asia	63	6	31
<i>Immigration period</i>			
Arrived before 1980	95	1	4
Arrived from 1980 to 1985	86	8	6
Arrived from 1986 to 1990	76	7	17
Arrived from 1991 to 1996	70	11	20

1. Estimated chances out of 100 for persons aged 32 to 54 with highest level of schooling in medical fields of study when all other variables in the model are controlled for.

Source: Statistics Canada, 2001 Census of Population.

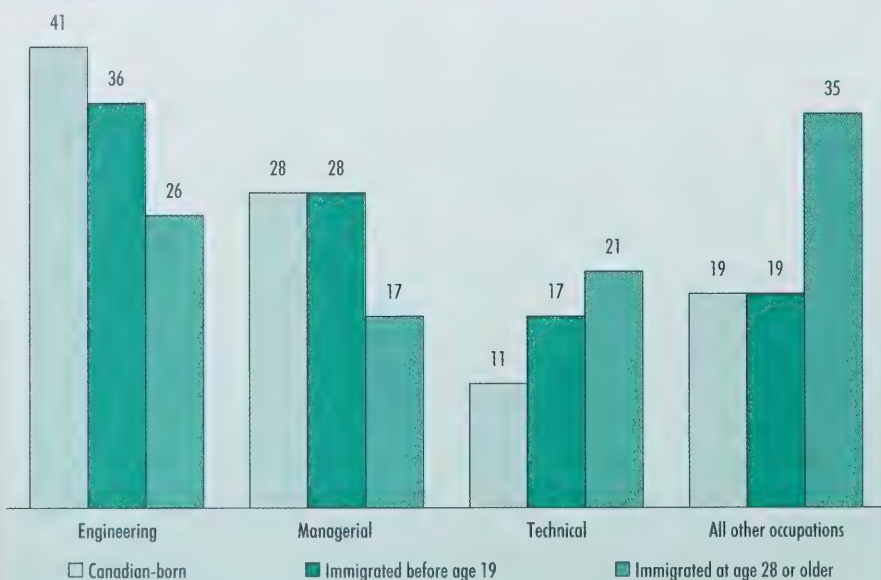
Canadian born, and over two-thirds of them live in Toronto, Vancouver or Montréal. Almost half are from Asian countries, and over one-quarter were born in Eastern Europe. Having emigrated from so many countries, foreign trained engineers represent a rich variety of cultures and it is no surprise that over two-thirds speak a language other than English or French in their homes. More than half are members of a visible minority group; in contrast, less than 3% of Canadian born engineers are visible minorities.

Many foreign trained engineers arrived in Canada during the 1990s; on average, they have been in the country for about 9 years. Unlike foreign trained physicians, engineers who studied abroad tend to be slightly more educated than the Canadian born, spending an average 5.4 years obtaining their credentials compared to 4.9 years.

Although internationally educated engineers are only marginally less likely to have been employed at the time of the 2001 Census, the occupations in which they worked are substantially different from those of the Canadian born. Only 26% of foreign-trained engineers hold jobs in engineering occupations, compared with 41% of Canadian-born engineers. And a far smaller proportion work in managerial occupations, at 17% and 28% respectively (Chart 2).

Chart 2 More than half of foreign-trained engineers worked in technical occupations or jobs unrelated to engineering in 2001

% of employed persons aged 32 to 54 with engineering fields of study



Source: Statistics Canada, 2001 Census of Population.

Western-trained engineers more successful in matching education with occupation

What underlies these differing occupational destinies of individuals who studied engineering? Personal characteristics play a role but, as with physicians, period of arrival in Canada and place of birth are key explanatory factors. Birthplace in particular is an important issue for engineers because the Canadian Council of Professional Engineers³ has mutual agreements recognizing accredited engineering programs in some countries, including the US, the UK, France, Australia, New Zealand

and Hong Kong. These agreements should minimize the potential barriers to professional re-certification faced by individuals who received their education in those countries.

Indeed, the predicted probability that an internationally educated engineer born in North America, Europe or Oceania would be employed as an engineer is effectively the same as that of a Canadian born engineer – 39% compared to 40%. The chances are almost as high, all other factors being accounted for, for engineers born in South Asia or in the Caribbean or Latin America. On the other hand, the predicted probability is very low, at only 15%, for those born in South East Asia (Table 2).

Similarly, the hypothetical chances of being employed as an engineer are lower for those who arrived in Canada

more recently, once other factors are controlled for. An internationally educated engineer who arrived before the 1980s would have a substantially higher probability of working in his chosen field than one who arrived in the early 1980s (47% versus 35%); another ten years later, in the early 1990s, the predicted probability would have been only 31%.

How being born in another country can influence job match in Canada

A professional's personal characteristics – level of education, field of study, language fluency, proximity to knowledge economy labour market, and so on – affect the likelihood of obtaining employment appropriate to his skills and training. But when he or she is an immigrant – and

especially if he or she has recently arrived – characteristics of the country of origin can also play a part in their success. Political or economic disruptions may mean a person cannot produce sufficient documentation for accreditation; for instance, during the 1990s, the number of immigrants accepted into Canada on humanitarian grounds increased.

Most importantly, though, for the professional seeking Canadian recertification are characteristics of the educational system in the source country: the length of schooling, the quality of education,⁴ including the content of professional degrees and the requirements for specialized degrees, as well as the use of French or English in the educational system (or in major sectors of the economy).

The model in this study takes into account differences within the two study populations by controlling for individual characteristics and variations in group compositional structure. However, it is not possible to account for differences in source country characteristics that may affect an immigrant's training and work experience. Nevertheless, the findings do suggest that occupational differences between the Canadian born and the foreign born are related to certification requirements, which may not view programs of study in foreign schools as equivalent to those provided by Canadian schools.

Summary

Census of Population data confirm that internationally educated physicians and engineers are less likely to find employment in occupations commensurate with their professional training. Underemployment is most common among foreign trained immigrants born in South East Asia and East Asia. Conversely, for those who received medical or engineering training outside Canada, the internationally educated born in European countries other than Eastern Europe or in South Asian

GST

Table 2 Birthplace has a significant impact on a person's hypothetical chances of working as an engineer

	Predicted probability of being employed in an engineering occupation ¹			
	Engineering	Managerial occupations	Technical occupations	All other occupations
Percent (distribution across)				
Canadian-born	40	28	12	21
Immigrated before age 19	40	29	13	18
Immigrated at age 28 or older				
<i>Birthplace</i>				
North America, Western Europe and Oceania	39	20	19	23
Eastern Europe	31	14	24	31
Caribbean, Central and South America	35	20	14	32
Africa	33	25	14	27
South Asia	34	25	12	29
South East Asia	15	11	15	58
East Asia	31	30	17	22
West Asia	27	35	9	29
<i>Immigration period</i>				
Arrived before 1980	47	21	11	22
Arrived from 1980 to 1985	35	26	15	24
Arrived from 1986 to 1990	32	22	16	30
Arrived from 1991 to 1996	31	17	20	32

1. Estimated chances out of 100 for persons aged 32 to 54 with highest level of schooling in engineering fields of study when all other variables in the model are controlled for.

Source: Statistics Canada, Census of Population, 2001.

countries are the most likely to practice medicine or to work as engineers.⁵ These findings are consistent with reports which stress that re-accreditation requirements are important factors mediating the labour market integration of the foreign trained.



Monica Boyd is a professor in the Department of Sociology, University of Toronto; **Grant Schellenberg** is a senior analyst in Business and Labour Market Analysis Division, Statistics Canada.

1. Both medical and engineering associations require demonstration of language proficiency for reasons of public safety. However, there can be significant disparities between licensing associations and applicants as to what constitutes acceptable levels of language "proficiency." Case studies reveal that professional immigrants are told that their language skills are insufficient when in fact they believe their language proficiencies are good. At issue here may be different perceptions over the number of words that are known or considered to represent a good level of language skills, the knowledge of technical terms used in Canada, and accent.
2. For the years 1996 to 1999, the number of international medical graduates (IMG) accepted in the second iteration of the resident match ranged from 11 to 35. Numbers rose thereafter, but in 2005 only 80 matches were made, involving IMG placements in Canadian medical schools. This represented 13% of the total number of foreign trained applicants who applied to the 2005 Canadian Resident Matching Service, and this rate is in general higher than observed in the early 1990s. (www.carms.ca/jsp/main.jsp?path=../content/statistics/report/re_2005#table23, accessed June 9, 2005; www.carms.ca/eng/operations_R1stat_2005_e.shtml#imgs2nd, accessed June 14, 2007). In 2006 and 2007, placements in the second iteration rose to 111 then fell to 69 foreign trained doctors respectively. However, following a motion agreed upon by the Association of Faculties of Medicine in Canada (AFMC), international medical graduates who meet the eligibility criteria are now permitted to apply to the first iteration in six out of eight provinces (www.carms.ca/eng/r1_about_intro_e.shtml, accessed June 15, 2007).
3. In February 2007, the Canadian Council of Professional Engineers changed its name to engineerscanada.com.
4. Boyd, M. And D. Thomas. 2001. "Match or Mismatch? The Labour Market Performances of Foreign-Born Engineers." *Population Research & Policy Review* 20: 107-133; Sweetman, A. 2004. "Immigrant Source Country Educational Quality And Canadian Labour Market Outcomes." Analytical Studies Branch Research Paper Series, Statistics Canada, Catalogue no. 11F0019MIE No 234.
5. Alboim, N. and E. McIsaac. 2007. "Making the Connections: Ottawa's Role in Immigrant Employment." *Choices* Vol. 13, No. 3 (May) 2-24; Szafran, O., R. A. Crutcher, and S. R. Banner Mamoru Watanabe. 2005. "Canadian and immigrant international medical graduates." *Canadian Family Physician*, Vol. 51 September 2005: 1242-1243; Wanner, R.A. 1998. "Prejudice, profit or productivity: Explaining returns to human capital among male immigrants to Canada." *Canadian Ethnic Studies*, Vol. 30, No. 3: 24-32.

Table A.1 Selected characteristics of the population aged 32 to 54, with medical fields of study, by age at immigration, 2001

	Canadian-born	Age 0 to 18	Age 28 or older	Total		Canadian-born	Age 0 to 18	Age 28 or older	Total
Population	24,485	3,825	5,395	33,705	Years since arrival				
Percentage (distribution down)					Not applicable	100	...	...	73
Sex					4 to 5	...	...	18	3
Men	65	69	62	65	6 to 10	...	...	38	6
Women	35	31	38	35	11 to 20	...	6	38	7
Age					21 years or more	...	94	6	12
32 to 39	32	44	14	30	<i>Average years since arrival</i>	...	32.0	10.8	...
40 to 49	51	41	56	50	Highest level of schooling				
50 to 54	18	16	30	20	Medical only	87	87	75	85
<i>Average age</i>	43.1	41.5	45.8	43.3	Medical and masters	10	9	14	10
Place of residence					Medical and Ph.D.	3	4	12	5
Montréal	16	10	10	14	Years of university				
Toronto	12	27	30	17	5 years ¹	6	2	...	5
Vancouver	7	12	11	8	6 years	13	13	30	16
Other census metropolitan areas	37	38	34	37	7 years	12	16	20	14
All other areas	28	14	15	24	8 years	16	16	14	15
Region of residence					9 years	11	10	6	10
Atlantic provinces	8	5	5	7	10 years	13	11	10	12
Québec	32	12	13	27	11 years	8	11	6	8
Ontario	32	50	47	37	12 years	9	8	6	8
Manitoba and Saskatchewan	6	5	6	6	13 years or more	13	14	7	12
Alberta	9	12	12	10	<i>Average years of university</i>	9.1	9.3	8.3	9.0
British Columbia	13	16	16	14	Field of study				
Territories and Nunavut	0.2	0.1	0.1	0.1	General practitioner	82	83	79	81
Visible minority status					Specialist	18	18	21	19
No	97	56	50	85	Employment status				
Yes	3	44	50	15	Not employed during reference week	2	3	12	4
Home language					Employed during reference week	98	98	88	97
Only English and/or French	99	91	54	91	Occupation				
Other languages	0.5	9	47	9	Medical doctor	90	90	55	85
Birthplace					All other health occupations	4	2	12	5
Canada	100	...	...	73	All other occupations	6	8	33	11
North America, Western Europe and Oceania	...	44	20	8					
Eastern Europe	...	6	16	3					
Caribbean, Central and South America	...	6	6	2					
Africa	...	9	22	5					
South Asia	...	10	9	3					
South East Asia	...	6	8	2					
East Asia	...	16	14	4					
West Asia	...	3	7	1					

... not applicable

1. Fewer years of schooling are required to obtain a bachelor's degree in Quebec.

Note: Figures may not sum to 100 due to rounding.

Source: Statistics Canada, 2001 Census of Population.

Table A.2 Selected characteristics of the population aged 32 to 54, with engineering fields of study, by age at immigration, 2001

	Canadian-born	Age 0 to 18	Age 28 or older	Total		Canadian-born	Age 0 to 18	Age 28 or older	Total
Population estimate	78,150	11,670	34,150	123,970	Years since arrival				
Percentage (distribution down)					Not applicable	100	...	...	63
Sex					4 to 5	...	...	28	8
Men	92	91	83	89	6 to 10	...	...	41	11
Women	8	9	17	11	11 to 20	...	12	27	9
Age					21 years or more	...	88	4	9
32 to 39	42	46	23	37	<i>Average years since arrival</i>	...	31.4	9.3	...
40 to 49	43	36	54	45	Highest level of schooling				
50 to 54	15	19	23	18	Bachelors	77	75	50	70
<i>Average age</i>	41.7	41.7	44.5	42.4	Bachelors with certificate or diploma	5	6	12	7
Place of residence					Masters	15	15	29	19
Montréal	18	14	11	16	Ph.D.	3	4	9	4
Toronto	14	34	44	24	Years of university				
Vancouver	6	10	14	8	3 years ¹	3	2	...	2
Other census metropolitan areas	43	34	27	37	4 years	50	51	31	45
All other areas	20	8	4	14	5 years	22	23	42	28
Region					6 years	12	12	12	12
Atlantic provinces	7	3	1	5	7 years	6	6	5	6
Québec	31	16	13	24	8 years or more	6	7	11	8
Ontario	36	56	60	44	<i>Average years of university</i>	4.9	5.0	5.4	5.1
Manitoba and Saskatchewan	4	2	2	3	Field of study				
Alberta	14	12	9	13	Electrical	19	22	24	21
British Columbia	9	12	15	11	Chemical	7	7	7	7
Territories and Nunavut	0.2	0.2	0.1	0.2	Civil	16	12	18	16
Visible minority status					Mechanical	17	16	21	18
No	98	57	47	80	Other engineering fields of study	15	14	14	15
Yes	3	43	53	20	Engineering not elsewhere classified	25	30	17	23
Home language					Employment status				
Only English and/or French	99	82	31	79	Not employed during reference week	5	6	11	7
Other languages	1	18	69	21	Employed during reference week	95	94	89	93
Birthplace					Occupation				
Canada	100	...	...	63	Engineering	41	36	26	37
North America, Western Europe and Oceania	...	45	13	8	Managerial	28	28	17	25
Eastern Europe	...	5	29	8	Technical	11	17	21	15
Caribbean, Central and South America	...	7	5	2	All other occupations	19	19	35	24
Africa	...	6	8	3					
South Asia	...	5	8	3					
South East Asia	...	8	11	4					
East Asia	...	18	17	7					
West Asia	...	5	10	3					

... not applicable

1. Fewer years of schooling are required to obtain a bachelor's degree in Quebec.

Note: Figures may not sum to 100 due to rounding.

Source: Statistics Canada, 2001 Census of Population.

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The richest source of information on the socio-economic condition of Canadian society is the Census of Population conducted every five years. Canadian Social Trends will be highlighting some of the key trends observed in data released from the 2006 Census.

Think of Canada and what tends to come to mind are wilderness scenes and wide-open spaces. However, the Canadian population is becoming increasingly urbanized. In 2006, 80% of all Canadians lived in an area classified as urban, up from 78% in 1996 and 76% in 1986. The fact that four out of five Canadians currently live in an urban area represents a great shift from earlier years in the 20th century. Before the Second World War, for example, just over half the Canadian population was urbanized.

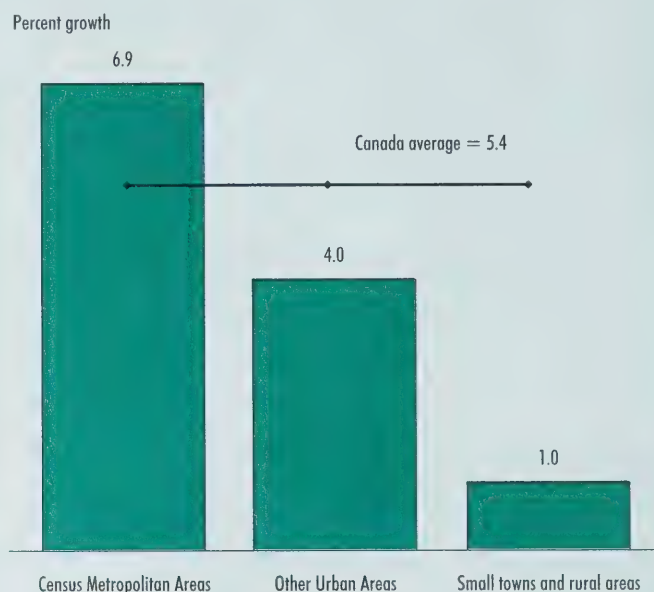
Census quick fact

As of May 16, 2006, the population of Canada stood at 31.6 million. This represented an increase of 5.4% from 2001, a faster rate of growth than the previous five-year period when the population rose by 4.0%. The current population growth rate, though, is still considerably slower than in the period following the World War II. From 1956 to 1981, for example, the average growth of the Canadian population was around 9% in each five-year intercensal period.

Most of the recent increase in the urbanization of the Canadian population is accounted for by the country's largest urban areas. Almost 90% of the total population in growth in Canada since 2001 has occurred in the country's 33 census metropolitan areas (CMA). Overall, between 2001 and 2006, the population living in one of the country's CMAs rose by almost 7%, compared with 4% in other urban centres and just 1% in small towns and rural areas.

As a result, as of 2006, 68% of the Canadian population lived in a CMA. Moreover, the majority of CMA inhabitants (45% of the total population) lived in one of the six largest CMAs – that is, either Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary or Edmonton. And these six urban areas accounted for two-thirds of population growth in the past 5 years. In fact, between 2001 and 2006, the population of the country's six largest CMAs grew by almost 8%, double the rate for the other CMAs (4%) over the same period.

Urban-rural variation in population growth across Canada, 2001 to 2006



Source: Statistics Canada, Census of Population, 2001 and 2006.

(A census metropolitan area is an urban area with a population of at least 100,000, including an urban core with a population of at least 50,000. Canada now has 33 CMAs, up from 27 in 2001. The six new CMAs are Moncton, Barrie, Guelph, Brantford, Peterborough and Kelowna.)

Overall, the population of the Toronto CMA is now over 5 million, while 3.6 million people live in Montréal, over 2 million in Vancouver, and just over one million in each of Ottawa-Gatineau, Calgary and Edmonton.

Calgary and Edmonton, whose populations exceeded one million for the first time in the 2006 census, are Canada's fastest growing major urban areas. Between 2001 and 2006, the population of Calgary grew by 13%, and that of Edmonton by 10%. There were also substantial population increases in Toronto (9%), Vancouver (7%), Ottawa-Gatineau (6%) and Montréal (5%).

While the largest metropolitan areas account for most of the overall population growth in Canada in recent years, a number of smaller cities have also grown substantially. Between 2001 and 2006, for example, the population of

Okotoks, Alberta, which is nestled in the Sheep River Valley just south of Calgary, rose by 47%, while other Alberta communities recording increases of over 20% included Wood Buffalo (24%), Red Deer (22%) and Grande Prairie (22%). The population was also up 19% in Barrie, one of Canada's newest

CMAs, while there were increases of 13% in Lloydminster on the Alberta-Saskatchewan border, and in Yellowknife.

For more information on census population and dwelling counts, or about the Census in general, visit the Census website at <http://www12.statcan.ca/english/census/index.cfm>.

Delayed transitions of young adults

by Warren Clark

The transition to adulthood is often viewed as a period where young people move by stages into adult roles. The years after age 18 offer an opportunity for young people to become increasingly independent from their parents. During this period of transition, young people make a wide range of choices about where and with whom they live, how they will pursue their studies, what type of work they are interested in and whether or not they will get married and have children.

In recent years, social scientists have found that the transition to adulthood is taking longer to complete. Young people are living with their parents longer,¹ are more highly educated and attend school for more years than their parents did. The age at marriage has been rising, fertility rates have been falling and the age at which women have their first child has been increasing.²

This article explores the transitions that young people make on their way to adulthood. Using census data from 1971 to 2001, it documents how the timing of transitions has changed and been delayed. It profiles the young adult population aged 18 to 34 and examines the five transitions that many young people make on their way to adulthood: leaving school, leaving their parents' home, having full-year full-time work, entering conjugal relationships and having children.

Briefly: The young adult population

According to the 2001 Census, there were approximately 6.7 million young adults between the ages of 18 and 34

in private households. About 41% of them were under 25, which is that year, when transitions to adulthood often occur most quickly. Young adults are also a highly heterogeneous group, reflecting the rapidly growing ethnic diversity of the Canadian population over the last 30 years: almost one in 5 is foreign-born, one in 6 is a member of a visible minority group (Table 1).

They are the most mobile group in the population -- about one in four had moved in the year prior to the 2001 Census -- as they actively seek out new education and employment opportunities and form their own households. They are also more likely to live in one of Canada's largest cities where education and job opportunities tend to be more abundant.

CST Table 1 Today's young adults aged 18 to 34 differ substantially from those 30 years ago

	1971	1981	1991	2001
Number of young adults aged 18 to 34 living in private households (000s)	5,398	7,366	7,447	6,685
	percentage			
Age				
18 to 24	48	44	36	41
25 to 29	29	29	31	28
30 to 34	24	27	33	31
Years in Canada since immigrating				
Canadian-born	84	86	85	82
5 years or less	6	3	4	6
Over 5 years	10	11	9	11
Non-permanent resident	...	...	2	1
Visible minority	...	5	11	16
Highest level of schooling				
Less than high school graduation	33	31	24	18
High school diploma or some postsecondary	42 ¹	33	35	34
Trades or college certificate or diploma	16 ¹	24	27	28
University degree, certificate or diploma	9	12	14	20
Ever-married or currently common-law union	61	59	54	45
Has children in same household	44	39	35	29
Lives in one of the 3 largest census metropolitan areas	32	30	34	36
Montréal	14	12	12	12
Toronto	13	13	16	17
Vancouver	5	5	6	7

... not applicable

1. Includes people who had college certificate or diplomas other than trades or vocational programs as they were not identified in the 1971 Census.

2. Includes only apprenticeship, trades and other vocational certificates, diplomas and completions.

Source: Statistics Canada, Censuses of Population.

The pace of each transition is slower than in 1971

Age 18 is often viewed as one of the milestones passed on the way to adulthood. In Canada, eighteen is the legal age for voting. It is the age at which many young adults prepare to leave high school and explore other educational or work opportunities. At age 18, few have crossed any of the five traditional bridges to adulthood: leaving school, leaving home, steady full-time work, conjugal union and parenting.

The number of transitions that a young adult has made is a rough indicator of their progress toward adulthood between ages 18 and 34. Using the markers set out in this article, that number can range from zero to five. Not surprisingly, on average, 18-year-olds have made fewer transitions to adulthood than

34-year-olds (Chart 1). But more importantly, young adults in 2001 had gone through fewer transitions than the 1971 cohort had when it was the same age.

On average, a 25-year-old in 2001 had gone through the same number of transitions as a 22-year-old in 1971 and a 30-year-old in 2001 had made the same number of transitions as a 25-year-old in 1971. This suggests that the path to adulthood is no longer as straight as it was back in 1971. In fact, you could say that the transitions of today's young adults are both delayed and elongated: delayed, because young adults take more time to complete their first major transition (leaving school), thus postponing all subsequent transitions; and elongated, because each subsequent transition takes longer to complete and stretches

the process from their late teens to their early 30s (as shown by the much gentler slope of the line for the 2001 cohort in Chart 1). In contrast, the 1971 cohort packs more transitions into the years from their late teens to their mid-20s and fewer into their early 30s.

Women make transitions earlier than men

Women generally go through the major transitions to adulthood at a younger age than men. They are more likely to leave home, marry and have children at a younger age; on the other hand, men leave school earlier and have full-year full-time employment at a younger age. In 2001, at age 18, there is no difference in the average number of transitions that young women and men have made (each report 0.4). However, because women go through

CST What you should know about this study

Typically the analysis of life course transitions uses longitudinal data where the same individuals are followed over a period of time. This article focuses on a comparative cohort analysis looking at four cohorts of young people aged 18 to 34 in private households from the 1971, 1981, 1991 and 2001 Censuses of Population. Five markers of the transition to adulthood are examined: leaving school, leaving home, working full-year full-time, finding a conjugal partner and having children.

These markers of adulthood are snapshots taken on the Census reference dates and do not represent completed or irreversible social changes: they simply record the state of transition young adults were in on those dates. If these young adults were questioned on other dates, they may have reversed direction in their transition to adulthood. For example, young adults who leave home at one point in time may return to live with their parents at a later date; those who no longer attend school may subsequently return; those who hold a full-time job may lose it or leave it. Some young people may combine school and work; others may test the labour market and then return to school. Some may begin their families before leaving school and entering the labour

market, while others may wait to marry and have children until after they have established a career.¹ Nevertheless, these indicators reflect key entry points to adult status and are therefore still useful in understanding the transition to adulthood.

The five markers of adult transition are:

Left school – has not attended school, college or university either full-time or part-time during the nine-month period between September and May.

Left parental home – is not a child in an economic family or a never-married child in a census family.

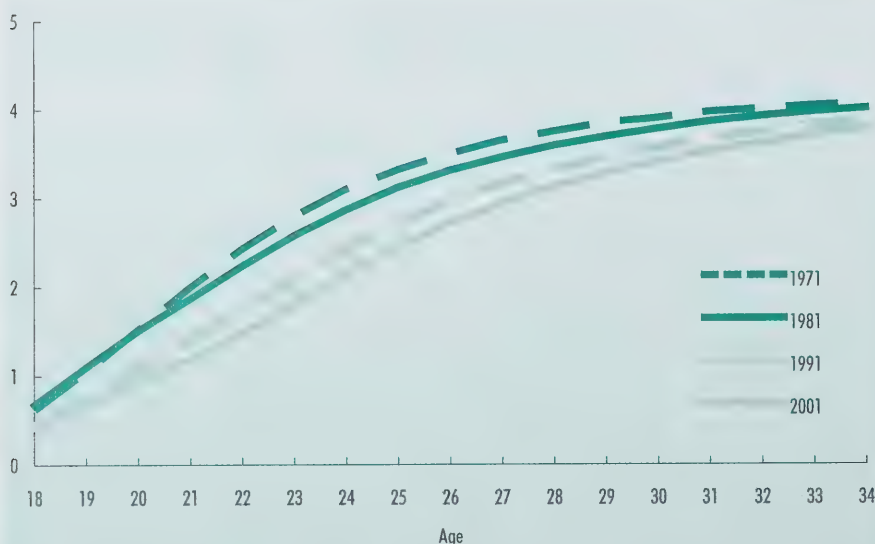
Full-time full-year work – has worked full-time for at least 49 weeks during the last year.

Ever in a conjugal union – is married, widowed, separated or divorced (i.e., ever married) or is currently in a common-law relationship. In the text, this concept is referred to as "ever in a conjugal union".

Has children – has never-married children living in the same household.

1. Rumbant, R.G. 2004. "Young adults in the United States: A Profile." The Network on Transitions to Adulthood. *Research Network Working Paper No. 4*. <http://www.transad.pop.upenn.edu>. Accessed 29 January 2007.

Average number of transitions



Source: Statistics Canada, Censuses of Population.

more changes earlier than men, the gender gap increases in the early to mid-20s. By the time they reach their 30s, the gap has closed (Chart 2).

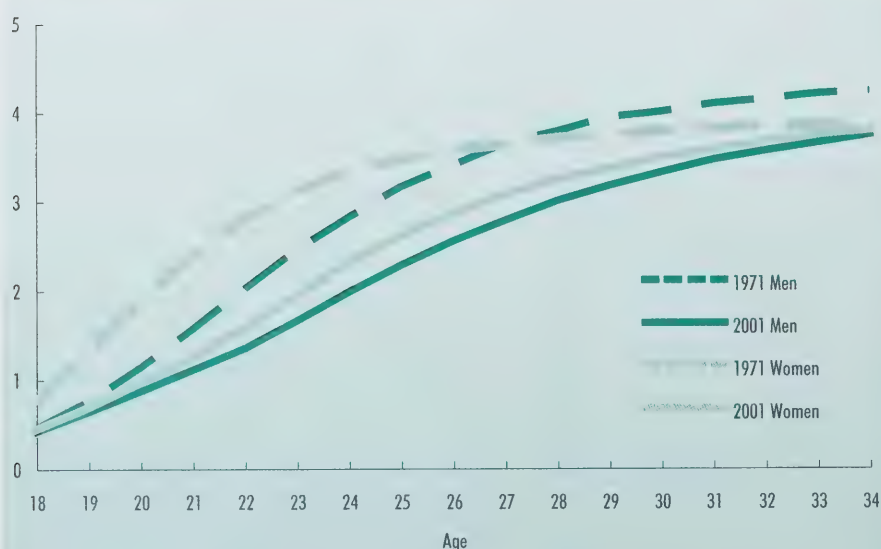
This is quite different from the situation in 1971, when young women had made more transitions than men by age 18 and the gender gap had closed at age 27. This was a time before it was common for young women to receive a postsecondary education, and many women got a job, and most married and had children after leaving high school. Similarly, men of that era were more likely to be in a conjugal relationship and to have children, explaining why they matured faster than the 2001 cohort.

Staying in school delays most transitions

The changing role of women in society has contributed to the remarkable progress women have made in their educational attainment over the last 30 years (Chart 3). No longer are they relegated to a narrow set of educational opportunities and career possibilities. The percentage of young women aged 30 to 34 who are university-educated has increased fourfold from 7% in 1971 to 29% in 2001. The proportion nearly doubled from 13% to 25% for young men over the same period. On many university campuses, women now outnumber men (although men still remain in the majority at the doctoral level).³

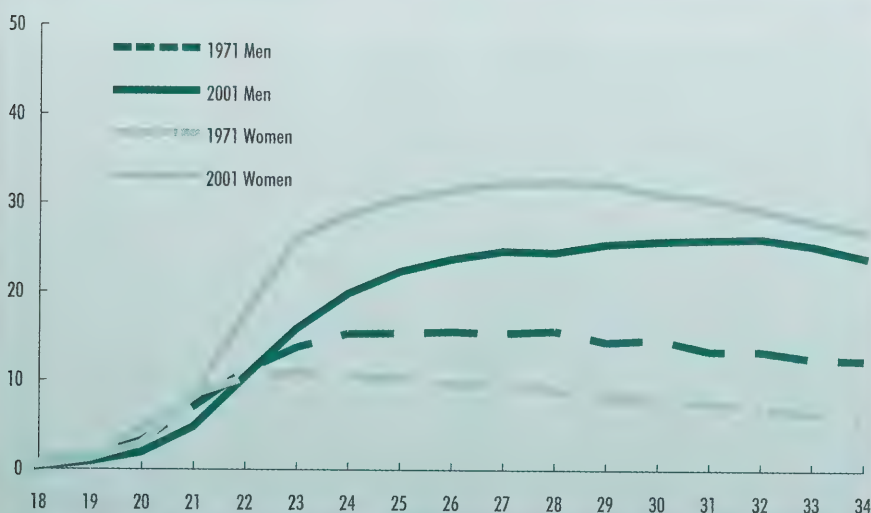
The result of these shifts in expectations and opportunities is that both women and men are finishing their education at later and later ages. In 1971, three-quarters of young adults had left school by age 22 whereas only half had left by that age in 2001. Today's bachelor's recipients graduate at age 23, but they are much more likely than the previous generation to go on to a master's or doctoral program where the median age of graduation is 29 and 33, respectively.⁴ Since most young people defer marriage and parenthood until they have completed their education, the extended period

Average number of transitions



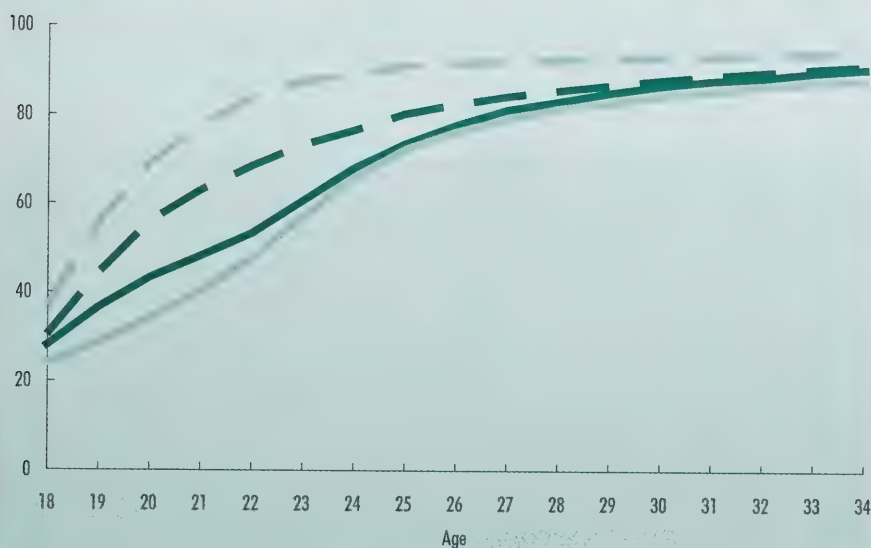
Source: Statistics Canada, Censuses of Population.

% university educated



... means leaving school at older ages

% not attending school



Source: Statistics Canada, Censuses of Population.

of schooling undertaken by today's young adults puts almost all other transitions to adulthood on "hold."

Women still leave home at a younger age than men

For many parents, an adult child leaving home is viewed as an indicator of successful transition to adulthood.

However, it is taking longer to reach that stage; in 2001, for example, 60% of men and 73% of women aged 25 were no longer living with their parents, compared with 78% of men and 89% of women aged 25 in 1971 (Chart 4). But most parents would also agree that living at home while attending school can make it

easier and less expensive for young people to complete their education and obtain employment.⁵ So more children delay their exit from the parental home until they complete their studies and are able to be financially independent. However, not only are today's young adults leaving home at later ages than their parents' generation, but they are also more likely to be returning.⁶

In each generation, though, young women tend to leave home sooner than men. This gender difference reflects the fact that women enter into conjugal relationships at younger ages than men.

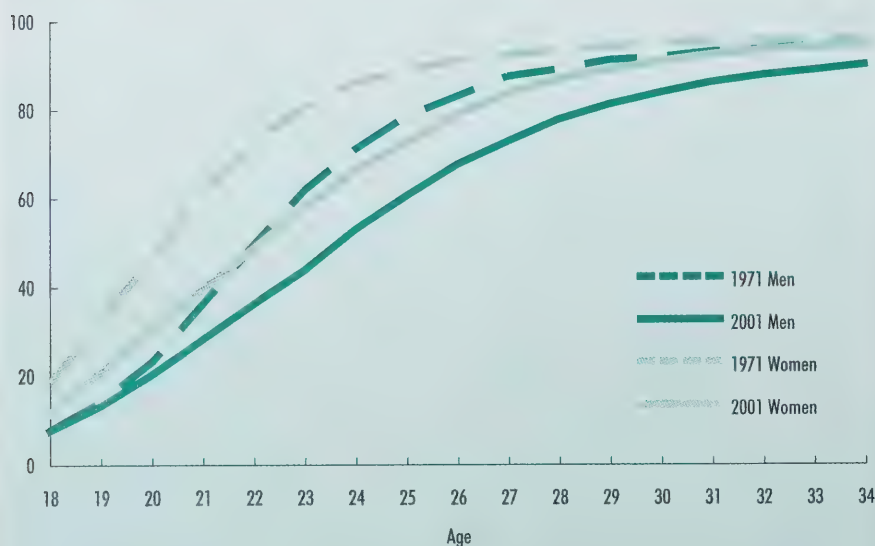
Once today's young adults do leave home, they are more likely to live alone. This is especially true for those with university education. Young men are also more likely than young women to live by themselves: the rate peaks at age 28 (13%) and remains fairly close to that peak until age 34. In contrast, the rate for women is highest at age 27 (9%) and then trails off. This suggests that, compared with the past, more young men have developed a bachelor lifestyle that lasts well into their thirties.

More women but fewer men make a transition to full-year full-time work

Compared with their counterparts in 1971, young men are less likely to be working full-time full-year while young women aged 24 and older are more likely to do so (Chart 5). This pattern clearly indicates that women today tend to stay in the labour market even after transitions such as having children.

Back in 1971, few mothers of pre-school children had full-year full-time work (9%), but by 2001, this proportion had tripled to 27%. Likewise mothers with older children also experienced increases in full-year full-time employment.⁷ On the other hand, women without children reported little change over the period, with about one-third holding full-year full-time work in both years.

% who have left home



Source: Statistics Canada, Censuses of Population.

Conjugal unions delayed

Dramatic changes have occurred in the living arrangements of young adults over the last 30 years. First, getting married and having children has become less common (Chart 6). Second, cohabitation and having children within a common-law union have become more popular, suggesting that for some, cohabitation may be a substitute marriage-like relationship where two partners share parenting, household chores, and resources. The third key trend is the increased popularity of remaining in the parental home (discussed earlier) and possibly leaving and returning to it several times.

The age at which people first marry has been edging up for both brides and grooms since the mid-1960s.⁸ Just as they have taken longer to leave school, leave home and find permanent jobs, today's young adults have delayed entering into married or common-law relationships (Chart 7). In 1971, 65% of men and 80% of women were in or had been in a conjugal relationship by age 25; by 2001, these percentages had dropped by almost half to 34% and 49%, respectively.

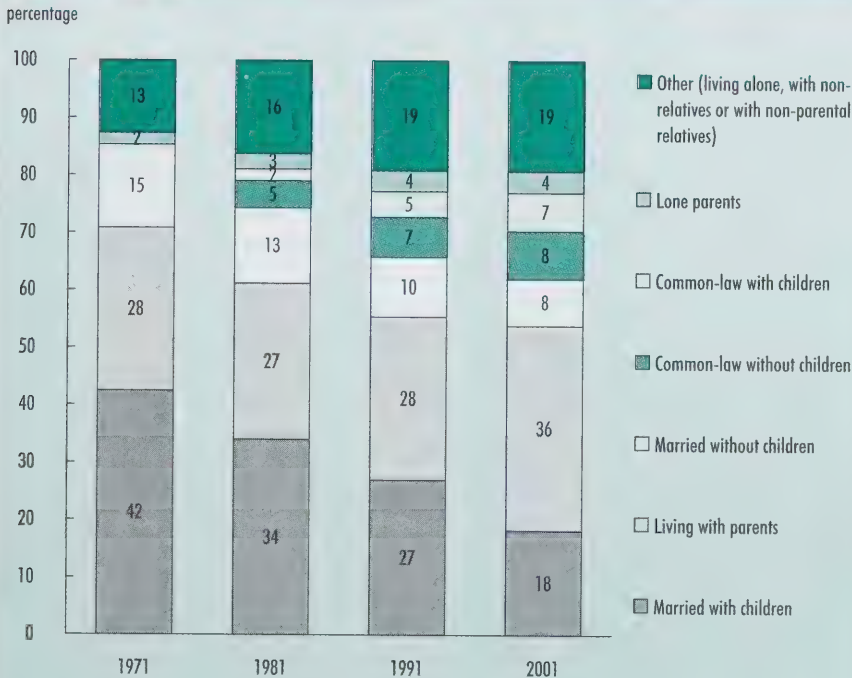
Although the paths to adulthood have become more diverse over the last generation, the most common trajectory still seems to be from school completion, to work, to home-leaving and then to marriage or cohabitation.⁹ With rising educational attainment extending the time needed to complete this first hurdle, it is not surprising that the formation of conjugal unions is delayed.

Census data show that young adults who leave school earlier are more likely to have a conjugal relationship at a younger age. In 2001, nearly half (49%) of 25-year-olds without a high school diploma had married or entered a common-law union compared with 32% of their university-educated peers. But even for people with similar levels of education, young adults today are less likely to be in a couple than they were over 30 years ago.

% with full-year full-time employment



Source: Statistics Canada, Censuses of Population.



Note: Common-law unions were not identified in the 1971 Census.

Source: Statistics Canada, Censuses of Population.

More often than not, first unions are now cohabitations rather than marriages. According to the 2001 General Social Survey, in 2001, 63% of women aged 20 to 29 in their first union lived common-law.¹⁰ Data from the Census show that common-law unions were most likely among young adults in their mid-20s (about 20%), but by age 34 only about 16% were cohabiting. The lower proportion of cohabitators in their early 30s may be because some people previously living together are now married or, given the greater instability of common-law relationships, more couples have separated.¹¹

Most young adults now postpone parenthood

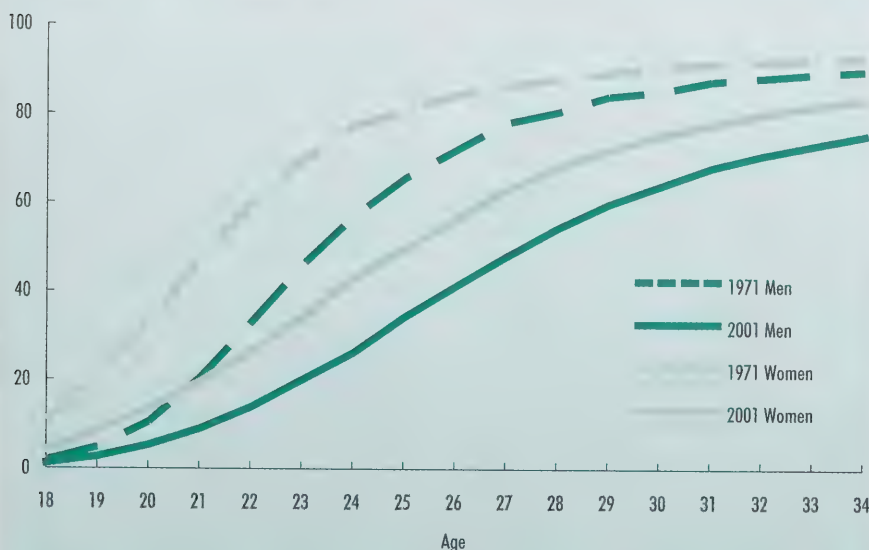
While the overall fertility rates in Canada for women under age 30 have dropped since the early 1970s, rates for women in their 30s have increased.¹² This delayed fertility is generally linked to women's increased education and labour force participation. Research has shown that women with high social status are more likely to complete their postsecondary education before motherhood, whereas women with lower social status tend to become mothers at younger ages and bypass postsecondary education, regular work and marriage.¹³ The pursuit of higher education, career aspirations and the elusiveness of work-life balance may inhibit many women today from having children at the same age that their mothers did. (Chart 8).

However, although marrying and having children later allows many young people to pursue post-secondary education and to gain employment experience and security in a highly competitive labour market,¹⁴ even those who have not gone beyond high school graduation have delayed childrearing.

Why are transitions delayed?

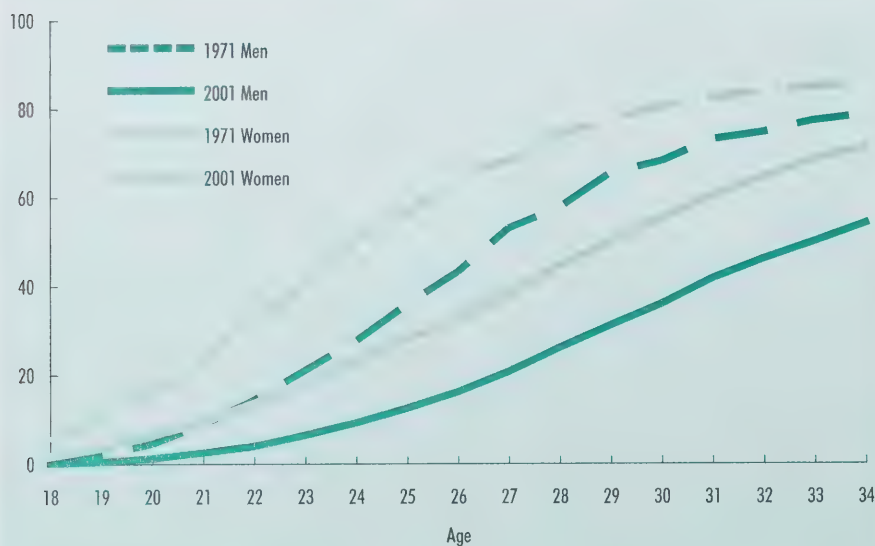
Many social and economic factors have contributed to the delay in transitions to adulthood. Young adults

% ever married or currently in a common-law union



Source: Statistics Canada, Censuses of Population.

% with children at home



Source: Statistics Canada, Censuses of Population.

today have a big incentive to continue their schooling beyond secondary completion for economic reasons. People with university degrees have significantly higher earnings and considerably lower unemployment rates than high school graduates. For example, since 1990, the number of jobs requiring a degree has doubled, while the number demanding high school education or less has shrunk.¹⁵ Today, prolonged schooling is necessary to gain the skills and education needed in a technical and information-based economy.

But another important reason is that young people are increasingly expected to continue their schooling. For instance, 95% of parents with children under age 19 believe that education after high school is important or very important.¹⁶ And over two-thirds of 15-year-olds intend to go on to university after completing their secondary studies, with many (39%) aspiring to more than one degree.¹⁷

Of course, a delayed exit from school has an impact on other transitions to adulthood. Although higher education enhances the chances of marriage, school enrolment impedes the first union formation, since most young people wait until they have finished university or college before they start thinking about marriage and parenthood. Tuition fees have been increasing more quickly than inflation since the early 1990s¹⁸ and the amount students owe to government student loan programs has also been escalating.¹⁹ The high cost of post-secondary education in many cases involves their continued reliance on their parents, so that young adults may not feel that they are sufficiently ready for marriage.²⁰

Studies of labour market conditions of younger men in Canada show that their earnings have declined while the education premium that they had over their older counterparts has disappeared.²¹ However, the decline in full-year full-time work for young

men may equally reflect lower job quality as young men report having less pension plan coverage, lower unionization rates and increased earnings instability while pension coverage for young women has improved slightly.^{22,23}

Today's young people face a labour market that earlier cohorts did not have to contend with: an increasing wage gap between newly hired employees and those with more experience; more temporary jobs for newly hired workers; and fewer male employees covered by registered pension plans, meaning that new hires are entirely responsible for saving for their own retirement without the backup of an employer sponsored pension plan.²⁴

Instability in employment is reflected in the much faster growth in part-time employment. The shift from full-time lifetime employment that many young adults entered 30 years ago to a work environment offering more part-time work with fewer benefits has contributed to insecurity, especially among young men, and is a contributing factor to delays in family formation.²⁵ Other researchers have found that union formation increasingly requires the earning power of both partners, so the labour market problems experienced by young men may reduce or delay the formation of unions.²⁶

In addition, housing prices have risen more quickly than the income of young men and despite declines in mortgage interest rates, young men would still have to spend more of their income on mortgage payments in 2001 than they did in 1971.²⁷ This reinforces the increased need for two incomes in order to own a home, adding to the economic insecurity young adults may feel.

Many young adults continue to live with their parents not just because of the financial burden of paying for their postsecondary education, but also because they may be unemployed or working in a low-paying precarious job. On the other hand, cultural factors may

encourage continued co-residence with parents as generation gaps narrow and parents have developed more egalitarian relationships with their children.²⁸

While the labour market has changed and the duration and cost of postsecondary education have increased, other social factors have also contributed to delayed transitions. Gender roles within marriage changed. As women became more educated, their earnings increased and they began to rely on their own earning capacity and less on their partner's to determine whether they should remain in the labour market after marrying and having children. In fact, with higher earnings, the care of children presented high opportunity costs to families, providing large incentives for women to return to the labour market after childbirth; consequently, women have seen strong increases in full-year full-time employment as their educational attainment rose. Back in 1971, women commonly entered the labour market after high school while remaining in their parents' home until a suitable marriage partner was found. By their mid-20s, many had married, had children and left the labour market to care for them.

Summary

In 1971, three-quarters of 22-year-olds had left school, nearly half were married and one in four had children. In contrast, in 2001, half of 22-year-olds were still in school, only one in five was in a conjugal union (usually common-law), and one in eleven had children. In 2001, young women led men in educational attainment and many more women had full-year full-time jobs than young women 30 years earlier.

Overall, the transition to adulthood is now delayed and elongated. It takes today's young adults longer to achieve their independence: they are leaving school later, staying longer in their parents' home, entering the labour market later, and postponing conjugal unions and childbearing.

Most 18- to 34-year-olds have passed through fewer adult transitions than people of the same age 30 years earlier. By age 34, however, today's women have made just as many transitions as 34-year-old women in 1971, although they are more likely to include full-year full-time work and less likely to include marriage and childbearing.

In contrast, men at age 34 have made fewer transitions than 30 years ago. This may be in part due to the economic changes that have made the labour market more dynamic. As a consequence, young men are less likely to have full-year full-time work than their fathers did 30 years earlier. Both men and women have upgraded their level of education in an effort to take advantage of the premium that university graduates enjoy in the labour market and this, by itself, has delayed other transitions to adulthood.



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Young people's access to home ownership

by Martin Turcotte

Home ownership is very important to the vast majority of Canadians. More than two-thirds of married couples are homeowners and among those who are renters, a great many would like to own property. Young adults are no different from the general population in this respect, although they are much less likely to be homeowners themselves.

It is easy to understand why young adults are less likely than their elders to own their own home: they have more limited financial resources, their labour market situation is less stable and they may not yet be in an established relationship. Some are simply not ready or interested in becoming homeowners. But despite all that, in 2006, owning their own home was very important to 76% of young adults aged 25 to 39 who no longer lived with their parents.

To what extent do young adults succeed in making this desire a reality? What are the characteristics of those young people who own their home, and what are the obstacles to home ownership? Using data from the 2006 General Social Survey on family transitions, this article answers these questions by identifying the different factors associated with home ownership among young people aged 25 to 39 who no longer live with their parents (hereafter called "people" or simply "young adults").

GST What you need to know about this study

This study is based on data from the 2006 General Social Survey (GSS) on family transitions. This survey collected information from 23,600 Canadians, 5,256 of whom were between the ages of 25 and 39 and did not live with their parents. It is this group, representing 5.9 million young adults, that forms the study population. For comparison purposes, the home ownership rates for the entire young adult population are included in Table 1, but they are not discussed in the text. Younger persons aged 18 to 24 were excluded from the study because very few of them own their own home (and because many still live with their parents). (See Table A.1 for the characteristics of the young adults in this study.)

In the 2006 GSS, respondents were asked to declare whether or not the home in which they were living was the property of a household member; if yes, they were asked if they themselves were the homeowner. In this article, the characteristics of these young homeowners are compared to non-homeowning young adults. It should be noted that this study does not take into account the quality of the homes

that young adults own; this fact must be kept in mind when interpreting the results.

This is the first time that Statistics Canada has collected information on home ownership at the individual level within the framework of the GSS. This type of data has been, and will continue to be, collected by the Census and other surveys at the household level.

The statistical analysis model

The statistical analysis uses odds ratios to identify various characteristics associated with the likelihood that a young adult aged 25 to 39 will own their own home. The results indicate whether there is a statistically significant relationship between the various characteristics included in the model, while holding the effects of the other variables constant. The variables included in the statistical model are household income, educational attainment, main activity in the past 12 months, lived with both parents until at least age 15, place of residence, time since immigration, living arrangements, age group and sex.

Young adults who are homeowners

Home ownership among young adults is of particular interest in the current economic and social climate. Indeed, the last few years have been marked by several factors that may have had negative effects on home ownership: rising housing prices (particularly in large urban centers), prolonged duration of formal education, and delays in various transitions to adulthood such as marriage or cohabitation.

On the other hand, several factors that may have facilitated buying a home have also materialized in the last few years: relatively low mortgage rates (despite their slight increase in the last two years), a strong labour market, and an unemployment rate at its lowest level in 30 years.

In addition to these positive market factors are the government programs designed to make it easier for young families to purchase their first home, such as sales tax rebates for new homes, access to mortgage loans for up to 100% of the value of the home, loans and subsidies for first-time buyers and young families, and so on.

It is difficult to quantify the extent to which these elements have influenced the likelihood of home ownership among young adults. However, it is possible to provide information about different subgroups of the population who were the most and least likely to be homeowners in 2006.

First of all, and perhaps not very surprisingly, home ownership rates increase with age (Table 1). While only 38% of young people between the ages of 25 and 27 owned their own homes in 2006, 63% of 31- to 33-year-olds and 73% of 37- to 39-year-olds did. These gaps are even greater if young adults living with their parents are included.¹

It is hardly shocking that household income also has a major impact on a person's chances of owning his or her own home. Only 22% of young adults reporting a household income

of less than \$30,000 per year were homeowners; meanwhile, 68% of those with \$50,000 to \$80,000, and 82% of those with \$100,000 or more were homeowners.

Finally, living arrangements and marital status are strongly associated with ownership. In 2006, 79% of young adults who were married and had children owned their own home. In comparison, this proportion was only 40% among individuals living alone and 33% among single parents.

Income: a major determining factor

Obviously, several of these factors are strongly correlated. For example, young adults who are older are more likely to live with a spouse and children, have higher income and generally have completed their studies. In order to separate the effect that these different factors have, a logistic regression analysis was conducted. This allows the estimation of the probability or chance of home ownership for a person with a given characteristic – for example, a married person compared to a single parent while holding other factors constant that also affect home ownership (see “What you should know about this study” for details).

The statistical model shows that household income is one of the factors, if not *the* factor, with the greatest impact on the probability of owning a home. Holding the other factors constant, the odds of being a homeowner were 1.7 times higher for young adults with household income over \$100,000 than for those with income between \$50,000 and \$80,000. This association is hardly surprising and matches the results of numerous earlier studies.² Quite obviously, insufficient income represents the major obstacle to home ownership (Table 2).

This obstacle can become even more difficult to overcome if the future income stream is not assured. Young people with a higher level of education can generally anticipate having a higher income and greater

financial stability over the coming years. These factors certainly play an important role in the decision to purchase a home because home ownership has significant financial repercussions that last for many years.

The links between education, income stability and home ownership are indirectly confirmed in the statistical model, which shows that people who had not completed secondary education had 40% lower odds of owning their own home compared to those who had received a university degree. People whose highest level of education was a secondary school diploma were themselves slightly less likely to own their own home when income, household situation and other factors remained constant.

This result linking education level with home ownership takes on special meaning given the increase in the educational homogamy of couples, that is, the increased tendency for both spouses to have a similar or identical level of education.³ If there is increasing income inequality between highly educated and less educated couples,⁴ it is also possible that there is growing inequality in their chances of owning their own home.

Temporary employment: an obstacle to home ownership

For several years, there has been much discussion about the increase in temporary employment.⁵ Many of these newly hired workers are young adults and it is possible that home ownership is more difficult for some of them. People who have temporary or seasonal jobs are often at higher risk of having an income that fluctuates from one year to the next. And indeed, banks evaluate access to mortgage financing according to a borrower's current and future income stability.

The GSS data show that young people who had a seasonal job or a job with a set end date, as well as casual or temporary employees,

Table 1 Financial stability and being married with children are associated with home ownership among young adults

	Percentage of young homeowners			Percentage of young homeowners	
	Not living with parents	Total (includes still living with parents)		Not living with parents	Total (includes still living with parents)
Total	60	54	Highest level of educational attainment		
Women	60	56	<i>Less than high school</i>	48	41
Men	60	52	High school diploma	56*	50*
Age group			College or trade diploma	64*	58*
25 to 27 years	38	26	University degree	62*	56*
28 to 30 years	52*	47*	Place of residence¹		
31 to 33 years	63*	59*	Toronto CMA	53*	44*
34 to 36 years	68*	66*	Montréal CMA	48*	44*
37 to 39 years	73*	71*	Vancouver CMA	54*	50*
Household living arrangements			Ottawa-Gatineau CMA	63	56*
Married without children	63*	...	Calgary CMA	65	63
Common-law union without children	49*	...	Edmonton CMA	60*	57
Married with children	79	...	CMA with population 250,000 to 750,000	60*	53*
Common-law union with children	63*	...	CMA or CA with population 100,000 to 250,000	63*	59*
Lone parent	33*	...	CA with population 10,000 to 100,000	65*	59*
Alone	40*	...	<i>Rural areas and small towns</i>	71	65
Other	21*	...	Always lived with both parents until age 15		
Main activity during the previous 12 months			No	52	48
Permanent employment	65	58	Yes	63*	55*
Self-employed	70	67*	Time since immigration		
Temporary employment	42*	36*	Less than 4 years	20*	19*
Looking for work	24*	18*	5 to 9 years	48*	45*
Student	20*	16*	10 to 24 years	59	49*
Caring for children/keeping house	63	62	25 to 39 years	70	64
Other activity	51*	41*	<i>Born in Canada</i>	64	57
Household income					
Less than \$30,000	22*	...			
\$30,000 to \$49,999	44*	...			
\$50,000 to \$79,999	68	...			
\$80,000 to \$99,999	80*	...			
\$100,000 or more	82*	...			

... not applicable

1. CMA = Census Metropolitan Area; CA = Census Agglomeration.

* Significant differences from reference group in italics at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2006.

were markedly less likely to own their own home (42%) than those with a permanent job (65%) (Table 1). Even when the effect of income and other factors are held constant, young people with temporary jobs had 40% lower odds of owning their own home than people with permanent employment⁶ (Table 2). Please note however that despite the increase in non-permanent jobs in the last

several years, young adults with temporary jobs remain a very small minority among the employed young adult population (Table A.1).

Living with both parents until age of 15 makes a difference

The odds of home ownership were 1.4 times higher for young people who had lived with both their parents until the age of 15, compared to

those people who did not. Although it is difficult to provide the exact explanation for this difference, we can imagine that young adults from more stable families may have had access to more resources, particularly financial resources, when buying their home. For example, parents may have acted as guarantors for their child's mortgage loan or have given their child monetary gifts or

Table 2 Home ownership is more probable among young adults over age 33, with household incomes over \$80,000 and among those living in rural areas and small towns

Odds ratios		Odds ratios	
Household income		Place of residence¹ — continued	
Less than \$30,000	0.2*	CMA with population 250,000 to 750,000	0.6*
\$30,000 to \$49,999	0.4*	CMA or CA with population 100,000 to 250,000	0.7
\$50,000 to \$79,999	1.0	CA with population 10,000 to 100,000	0.9
\$80,000 to \$99,999	1.6*	<i>Rural areas and small towns</i>	1.0
\$100,000 or more	1.7*	Time since immigration	
Highest level of educational attainment		4 years or less	0.2*
Less than high school	0.6*	5 to 9 years	0.5*
High school diploma	0.8*	10 to 24 years	0.8
College or trade diploma	1.1	25 to 39 years	0.8
University degree	1.0	<i>Born in Canada</i>	1.0
Main activity during the previous 12 months		Household living arrangements	
Permanent employment	1.0	Married without children	0.4*
Self-employed	1.5*	Common-law union without children	0.2*
Temporary employment	0.6*	<i>Married with children</i>	1.0
Looking for work	0.3*	Common-law union with children	0.4*
Student	0.4*	Lone parent	0.2*
Caring for children/keeping house	0.7*	Alone	0.2*
Other activity	0.6	Other	0.1*
Always lived with both parents until age 15		Age group	
No	1.0	25 to 27 years	1.0
Yes	1.4*	28 to 30 years	1.2
Place of residence¹		31 to 33 years	1.6*
Toronto CMA	0.4*	34 to 36 years	2.1*
Montréal CMA	0.4*	37 to 39 years	2.2*
Vancouver CMA	0.5*	Sex	
Ottawa-Gatineau CMA	0.5*	Women	1.0
Calgary CMA	0.9	Men	0.9
Edmonton CMA	0.6		

1. CMA = Census Metropolitan Area; CA = Census Agglomeration.

* Statistically significant difference from the reference group shown in *italics* ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2006.

interest-free loans to help with the down payment. It is also possible that parents who stayed together were themselves homeowners and that this was less common among parents who separated. For example, a Dutch study has shown that having homeowning parents was a positive influence on the probability that young couples would also become homeowners themselves.⁷

Young rural residents are more likely to be homeowners

Place of residence is also associated with the rate of home ownership among young people who no longer live with their parents. In 2006, about 71% of people between the ages of 25 and 39 who lived in a rural area or in a small town owned their own home. By comparison, this was the case for 53% of young people living in Toronto, 48% of those living in Montreal and

54% of those living in Vancouver⁸ (all references to the census metropolitan area, or CMA).

Even when the other factors in the statistical model are held constant, the odds of being a homeowner are only half as high for young adults in Canada's three largest CMAs as they are for young adults in rural settings and smaller urban areas (Table 2). These gaps in home ownership can be explained largely by housing costs,

Young adults who have previously owned a home

This study compares the characteristics of young adults who own their own home to those who do not. However, 15% of people aged 25 to 39 not living with their parents and who were not homeowners at the time of the study had, in fact, been homeowners at least once before. These young adults were on average slightly older than those who had never owned a home (34 versus 31 years old). Apart from their age, the socio-economic characteristics of these former homeowners were fairly similar to those of young adults who had never owned a home.

Being a young co-owner

People can become homeowners in many different ways: by themselves, with a spouse, with a family member or with friends. However, the vast majority of young adults opt for the first two choices. In 2006, 22% of young adults who owned their own home had decided to buy their home alone, while 76% had become homeowners with their spouse or common-law partner. A very small number – around 2% – had become homeowners with their parents, parents-in-law, other family members or friends.

which are much higher in big cities. The scarcity of rental housing in more rural settings and small cities may also explain the higher rates of home ownership found in those areas.

The case of young adults in Calgary is worth noting because it is an exception. These young people are just as likely to be homeowners as those living in more rural settings, even when the other factors in the statistical model are taken into account.⁹

Having a low income and living in a large CMA

If people living in CMAs are generally less likely to own their own home than those living in smaller communities, this is even more true for young adults earning low incomes. For example, 40% of young adults who had households incomes under \$30,000 per year but who lived in rural settings were homeowners, compared with only 16% of their counterparts living in one of Canada's six largest CMAs. Households with lower income, in addition to being unable to own a home, often face a particularly difficult situation in the rental market as well. They must devote a large percentage of their income to housing and their living conditions are often inadequate.¹⁰

Even for those young people with the highest household incomes (\$80,000 or more a year), there is a difference, although it is not as great: 78% of these big city dwellers were homeowners versus 85% of those living in rural environments. Above certain income levels, of course, buying a home can first and foremost become a question of choice and preference, no matter where the person lives. The fact remains, though, that the lower housing prices in smaller towns favour more egalitarian access to home ownership.

Few recent immigrants own their own home

According to the 2001 Census, a household in which the main wage-earner is an immigrant is much less likely to own a home than one whose main wage-earner is Canadian-born.¹¹ This is an important change since 1981, when the exact opposite was observed.¹²

The data from the 2006 GSS clearly show that the number of years spent in Canada since immigration is associated with the probability of being a homeowner. Almost two-thirds (64%) of young adults born in Canada and no longer living with their parents were homeowners.

But this was true of less than half (48%) of their counterparts who had immigrated five to nine years earlier, and of only 20% of immigrants who had come in the preceding 5 years. These differences remain significant when the effect of all the other factors in the statistical model are taken into account.

Other factors unique to recent immigrants to Canada, such as their country of origin and having a home in the central neighbourhoods of big cities rather than the suburbs, can affect ownership rates. However, examining these factors is beyond the scope of the present study.

Married people are more likely to be homeowners than common-law couples

Financial situation and economic barriers are not the only factors linked to home ownership among young adults. The different stages of family life, and of the life cycle in general, are also associated with varying rates of home ownership. People in relationships are much more likely to own their own home than those who live alone. For example, young married couples with children have five times higher odds of being homeowners than people living alone (when all the other factors, including income, are held constant).

An interesting distinction appears between married couples and those who are cohabiting. While 79% of young married adults with children owned their own home, this was the case for only 63% of young adults who also had children but were cohabiting. This difference remains statistically significant in the statistical model when the other factors that could differentiate these families are taken into account.

The first factor that explains this difference in home ownership rates is the fact that marriage implies that a home owned by one spouse automatically becomes the property of both spouses after marriage, which is not necessarily the case when a couple lives together. However, other elements may also play a role. Common-law relationships are generally less stable than marriages¹³ and it is possible that some people wait until they are married before buying a home. It is also possible that people who choose cohabitation over marriage have different tastes and preferences than married couples in a variety of areas, including housing.

Being older has an effect independent of all other characteristics

The correlation between age and the probability of being a homeowner is very strong. Even when all the other factors that influence home ownership are held constant, the effect of age remains statistically significant. For example, the odds that 37- to 39-year-olds would own their own home are 2.2 times higher than those for 25- to 27-year-olds.

This result suggests that beyond the effects that different life events and different statuses have on home ownership – such as finishing one's education, getting married, increasing salary – young adults only become ready or interested in buying a home at a certain stage, perhaps when they have decided to establish themselves more permanently in one location.¹⁴

Summary

Whether it is because buying a home is seen as a good investment, a form of forced savings or as a source of satisfaction in being truly "at home," becoming a homeowner is important for the vast majority of young adults. Along with leaving the parental home, getting married or cohabiting, finding a "real" job and welcoming the birth of a first child, buying a home constitutes one of the main transitions to adult life. This study identified the factors associated with having a larger or smaller probability of home ownership among young adults aged 25 to 39 who no longer live with their parents.

A young person's primary activity in the labour market, their number of years spent in Canada, their age and their place of residence are the four characteristics that have the greatest effect on the probability of home ownership. Young adults born in Canada who have held a permanent job in the last 12 months and who live in a rural environment were the most likely to own their own home.

On the other hand, recent immigrants living in a CMA like Toronto, Montréal and Vancouver were much less likely to own their own home. If these young adults, in addition to having these characteristics, did not have a stable job and were younger, their probability of being homeowners was almost non-existent.

Despite the effect that individual factors can have, it is the household characteristics that matter most to a person's chances of being a homeowner. Young adults were the most likely to own their own home if they were married and had children, as well as if they had the highest household incomes.



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1. Given the impact that household income and household situation have on home ownership, it would have been very difficult to thoroughly analyze all the statistical associations if young people who are still living with their parents were included in the analysis. Not surprisingly, home ownership rates are necessarily higher when only people who no longer live with their parents are included.
2. Lefebvre, S. 2002 "Housing: A Question of Income." *Perspectives on Labour and Income*. Statistics Canada, Catalogue no. 75-001, Vol. 14, No. 3; CMHC. 2006. *Canadian Housing Observer* 2006.
3. Hou, Feng and John Myles. 2007. "The Evolution of the Role of Education in Choosing a Spouse: Educational Homogamy in Canada and the United States since the 1970s." *Analytical Studies Branch Research Paper Series*. Statistics Canada, Catalogue no. 11F0019, no. 299.
4. Morissette, René and Anick Johnson. 2004. "The Wages of Less Educated and Highly Educated Couples on the Canadian Labour Market, 1980 to 2000." *Analytical Studies Branch Research Paper Series*. Statistics Canada, Catalogue no. 11F0019, no. 230.
5. A recent study by Statistics Canada also demonstrated that "the number of temporary jobs is clearly on the rise among newly hired employees." In this study, we showed that the proportion of temporary jobs among newly hired workers went from 11% in 1989 to 21% in 2004. For more information, see: Morissette, René and Anick Johnson. 2005. "Are Good Jobs Disappearing in Canada." *Analytical Studies Branch Research Paper Series*. Statistics Canada, Catalogue no. 11F0019, no. 239.
6. When personal income rather than household income was used in the analysis, the difference was similar and was also statistically significant.
7. Mulder, Clara H. and Jeroen Smits. 1999. "First-Time Home-Ownership of Couples – The Effect of Inter-Generational Transmission" *European Sociological Review*. Vol. 15, No. 3, pp. 323-337.
8. However, young people who live in big cities are also more likely to continue living with their parents longer. Consequently, the differences between young adults living in big cities and those living in more rural settings, from a home ownership standpoint, are even greater when all young people are included in the analysis, whether they live with their parents or not.

9. This gap cannot be explained by the fact that the proportion of young adults who live with their parents is higher in large urban areas. When all young adults are considered in the analysis, whether they live with their parents or not, Calgary residents are just as likely to own their own home as those who live in rural areas.
10. CMHC. 2004. "2001 Census Housing Series Issue 4 Revised: Canada's Metropolitan Areas." *Research Highlight/Socio-economic Series*, 04-008.
11. CMHC. 2004. "2001 Census Housing Series. Issue 7 Revised: Immigrant Households." *Research Highlight/Socio-economic Series*, 04-042.
12. Haan, Michael. 2005. "The decline of the immigrant home ownership advantage: Life-cycle, declining fortunes and changing housing careers in Montreal, Toronto and Vancouver, 1981-2001." *Analytical Studies Research Paper Series*. Statistics Canada, Catalogue no. 11F0019, no. 238.
13. Statistics Canada. 2002. *The Diversification of Married Life in Canada*, Catalogue no. 89-576-XIF.
14. It is also possible that other factors also associated with the aging of young adults were not taken into account in the analysis, or were not accurately captured by the variables that were included. It cannot be assumed that young adults who are 18 today will have the same behaviour when they are 39 as those who are 39 today.

Table A.1 Distribution of young adults aged 25 to 39 no longer living with their parents, by selected socio-economic characteristics, 2006

% of young adults		% of young adults	
Total	100	Highest level of educational attainment	
Women	52	Less than high school	7
Men	48	High school diploma	25
Age group		College or trade diploma	33
25 to 27 years	15	University degree	34
28 to 30 years	20	Place of residence¹	
31 to 33 years	20	Toronto CMA	17
34 to 36 years	22	Montréal CMA	12
37 to 39 years	23	Vancouver CMA	7
Household living arrangements		Ottawa-Gatineau CMA	4
Married without children	12	Calgary CMA	4
Common-law union without children	9	Edmonton CMA	4
Married with children	42	CMA with population 250,000 to 750,000	15
Common-law union with children	11	CMA or CA with population 100,000 to 250,000	9
Lone parent	6	CA with population 10,000 to 100,000	12
Alone	10	Rural areas and small towns	17
Other	11	Always lived with both parents until age 15	
Main activity during the previous 12 months		No	22
Permanent employment	62	Yes	78
Self-employed	9	Time since immigration	
Temporary employment	6	Less than 4 years	6
Looking for work	2	5 to 9 years	5
Student	5	10 to 24 years	7
Caring for children/keeping house	14	25 to 39 years	4
Other activity	2	Born in Canada	79
Household income			
Less than \$30,000	11		
\$30,000 to \$49,999	16		
\$50,000 to \$79,999	26		
\$80,000 to \$99,999	13		
\$100,000 or more	20		

1. CMA = Census Metropolitan Area; CA = Census Agglomeration.

Source: Statistics Canada, General Social Survey, 2006.

Staying at home longer to become homeowners?

by Martin Turcotte

It is no longer news that young adults, on average, remain at home longer and are more likely to return after leaving. Demographers and sociologists have presented various explanations for these two trends, including the prolonged period of formal education and the accumulation of debt, the temporary nature of the jobs often held by young people, delayed formation of couples, changes in values and preferences, and so on.

More recently, the media and the popular press¹ have suggested another explanation: many young adults are living with their parents longer (or returning after their initial departure) in order to save so they can purchase their own home when they eventually leave their parents' home. Staying with their parents longer, or returning to the nest after a first departure, is thus a strategy for accessing home ownership more easily.

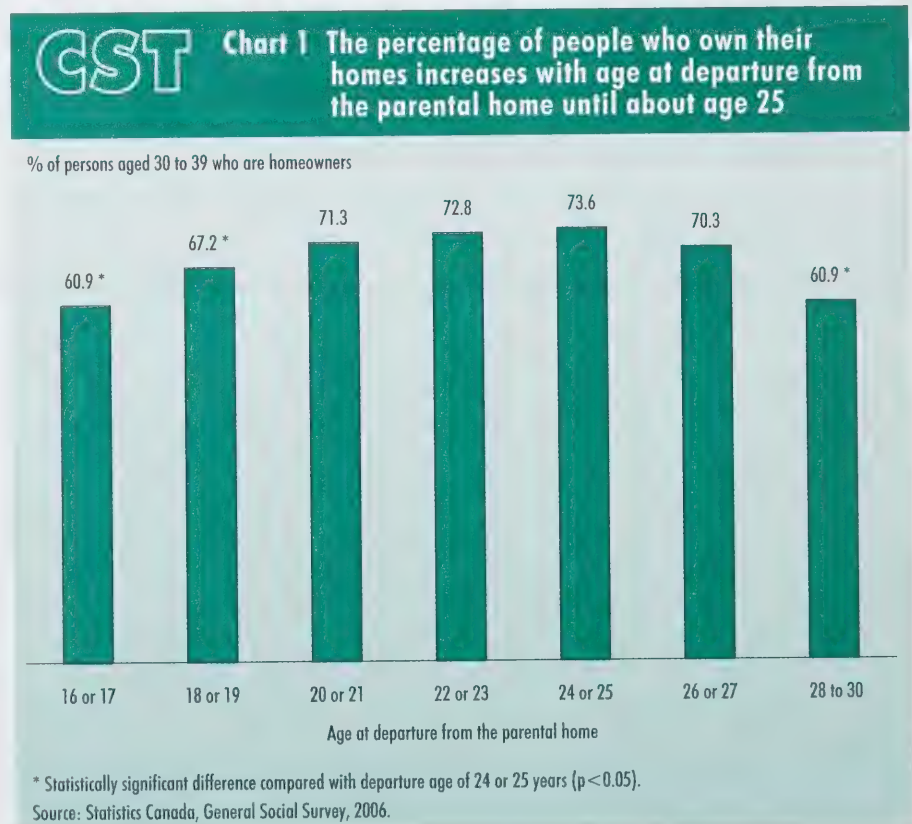
How closely do these theories reflect reality? Are young people who stay in the family home longer really more likely to purchase a home? And what about "boomerang kids" – those who return to live with their parents after initially leaving? Using data from the 2006 General Social Survey (GSS) on family transitions, this article examines whether there is a link between the age at which young people leave the family home, and the likelihood that they become homeowners in their 30s.

To do so, it will consider various factors highlighted in past research as influences on access to home ownership.

The age of leaving home and home ownership

The likelihood of becoming a homeowner increases in relation to the age at which the person left home,

but only to a certain point (Chart 1). In fact, for those who left home after the age of 25, the likelihood of becoming a homeowner in their 30s seems to decrease. The two groups that stand out most clearly, having the lowest rate of home ownership, are those who left the family home very early (at age 16 or 17) and those who left later (at age 28 to 30).



GST What you need to know about this study

This study is based on data from the 2006 General Social Survey (GSS) on family transitions. Only persons aged 30 to 39 who were not living with their parents at the time of the survey, and who had left the family home between the ages of 16 and 30, are considered. For those who had left the family home more than once before the age of 30, the date of the *last* departure was chosen as the date of departure. The study population represents 90% of all younger adults aged 30 to 39 who were no longer living with their parents.

People who left their parents' home before the age of 16 are excluded because their situation and life course is very different from that of the majority of young people. Please see "Leaving home before age 16" for more information about this group of younger adults.

The statistical analysis model

The statistical analysis uses odds ratios to identify various characteristics associated with the likelihood that a young adult aged 30 to 39 will own their own home. The results indicate whether there is a statistically significant relationship between the various characteristics included in the model, while holding the effects of the other variables constant. The variables included in the statistical model are age at time of departure, reasons for returning to the parental home (if so), household income, educational attainment, main activity in the past 12 months, having lived with both parents until at least age 15, place of residence, time since immigration, living arrangements and sex.

This conclusion remains exactly the same even after using a statistical model to hold constant the various factors associated with the probability of being a homeowner, such as household living arrangements, income and so on² (Table A.1). There is a positive relationship between leaving the family home at a later age and home ownership. However, contrary to the idea that a person's chances of being a homeowner increase the longer they remain in the parental home, the likelihood of home ownership increases only to a certain point.³ After the age of departure reaches about 25, the predicted probability of home ownership changes direction and begins to fall, although only slightly. (Chart 2).

Based on these results, it appears that the age of departure from the family home, although far from being the most significant factor, can make a difference in terms of access to home ownership. This is especially true for early departures, which are associated with a lower rate of home ownership. For later departures – that is, those that occur after the mid-20s – it seems that

other factors such as income, marital status, and so on take the lead. In short, these results partially confirm the idea that leaving the family home at a later age increases the possibility of subsequently becoming a homeowner.

Boomerang kids and home ownership

According to a recent survey, a large number of young adults return to live with their parents because they want to save for their first house.⁴ If that is the case, one would expect that boomerang kids now living on their own should be more likely to own their own homes than those who left home only once. However, that's not how it works.

In fact, the proportion of boomerang kids aged 30 to 39 who owned their own home (68%) was not statistically different than that for those who had left the parental home only once. Furthermore, the statistical model shows that, when other factors are held constant, the odds of boomerang kids being homeowners were less than those in their 30s who had left the family home and never returned (Table A.1).⁵

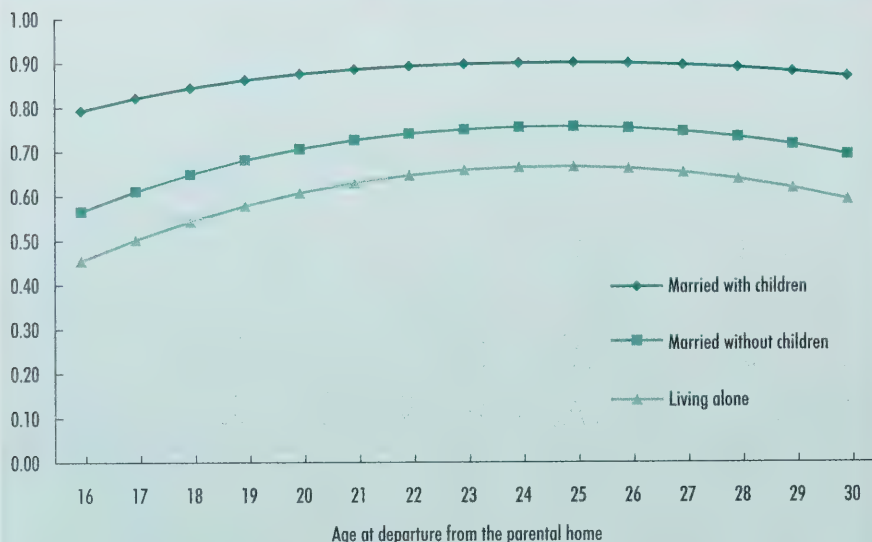
There are several reasons why young adults may return to live with their parents after initially leaving. These may include divorce, loss of employment or temporary financial problems. To adequately understand the relationship between being a boomerang kid and the likelihood of being a homeowner, the reasons behind a young adult's return to the family home must be included in the analysis.

Boomerang kids are not all equal in terms of access to home ownership. Those who returned to live with their parents because of loss of employment or for financial reasons were much less likely to be homeowners in their 30s than those who never returned.

However, holding the effect of the other factors constant, persons who "boomeranged" because a relationship ended or because they finished their studies were no less likely to become homeowners than those who never returned to live with their parents.⁶

Chart 2 No matter what their age at departure, the predicted probability of being a homeowner is highest for married persons with children³

Predicted probability of persons aged 30 to 39 being a homeowner



Source: Statistics Canada, General Social Survey, 2006.

Summary

This study has uncovered a positive association between the age at which young adults leave the family home and the likelihood of them becoming homeowners in their 30s. However, this finding is true only until a person reaches their mid-20s. Beyond about age 25, the later their departure, the lower their probability of being a homeowner in their 30s.

Furthermore, it seems that boomerang kids who return to live with their parents after initially leaving, are less likely to be homeowners in their 30s than those who left the family home only once. This is especially the case among persons who came back to live with their parents because they lost their jobs or were having financial problems.

CST

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Leaving home before age 16

Few people aged 30 to 39 (less than 3%) had left the family home before the age of 16, according to the 2006 GSS. Nevertheless, they are the least likely to be homeowners, at only 54% compared with 74% of those who had left home at age 24 or 25. For several reasons, establishing a potential relationship between the age at departure and the likelihood of becoming a homeowner did not seem to be the right approach in this case.

First, a relatively high proportion of individuals in this group (40%) had left the family home because of the death or hospitalization of one or both parents compared with 20% of those who left at age 18 or 19 and less than 8% of those who left after age 19. These young adults may have suffered a multitude of repercussions and stress in their lives: adjustment to life in a new family, trauma caused by

the loss of parents, and so on. Among other things, it was probably more difficult for them to obtain the support that parents can often provide during the various transitions to adulthood, including the purchase of a home.

Furthermore, some young people may have left home at an early age because of a difficult family situation, which may also have long-term repercussions. The fact that the proportion of persons who did not finish their post-secondary education is significantly higher in persons who left home at a relatively young age (16% compared to 7% among those who left at age 16 or older) is an indicator of the various problems they may have encountered. Several other aspects characterizing the particular experiences of these young people that could explain their lower home ownership rate could probably not be measured using this survey.

1. Boyle, Theresa. 2007. "Kids hang in with parents to raise a down payment", *Toronto Star*, April 28.
El Nasser, Haya. 2005. "Why grown kids come home" *USA Today*, http://www.usatoday.com/news/nation/2005-01-10-cover-kids_x.htm, website checked on July 6, 2007; "Boomerang kids," *Canadian Living*, September 2004.
2. For a description of the various factors that were included in this analysis, see Turcotte, Martin. 2007. "Young people's access to home ownership," *Canadian Social Trends*, Catalogue no. 11-008-XIE no. 84.
3. The predicted probabilities in Chart 2 were estimated holding the other factors included in the statistical analysis constant, so that they correspond to the profile of a "typical individual." This "typical person" had the following characteristics: a 35-year-old man with a household income between \$50,000 and \$59,999, who had completed a college diploma, held a permanent position and lived in the Toronto CMA.
4. BMO Financial Group. 2007. *Reality Bites: Generation Y Moving Home to Break Into the Real Estate Market* Unprecedented number of 21 to 34 year olds living with mom and dad. News release, April 17, 2007. www.bmo.com (accessed on October 24, 2007).
5. If the reference population is changed to include only adults aged 35 to 44 (and if we consider the fact that certain persons return to live with their parents after the age of 30), the conclusions remain exactly the same: boomerang kids are less likely to own their own homes than those who left the family home only once.
6. The difference from the group of people who never returned home to live with their parents was not statistically significant in the logistic regression analysis.

Table A.1 Factors associated with home ownership among young adults no longer living with their parents and having left the parental home between 16 and 29 years of age, 2006

	Odds ratios		Odds ratios
Age at departure from parental home	1.76*	Always lived with both parents until age 15	
Age at departure squared¹	0.989*	No	1.00
Reason for return to parental home		Yes	1.33*
No return to parental home	1.00	Place of residence²	
Lost employment	0.34*	Toronto CMA	0.41*
Break-up of couple	0.63	Montréal CMA	0.44*
Financial reasons	0.48*	Vancouver CMA	0.46*
Studies completed	0.81	Ottawa-Gatineau CMA	0.60
Other reason/no reason given	0.81	Calgary CMA	0.96
Household income		Edmonton CMA	0.43*
Less than \$30,000	0.14*	CMA with population 250,000 to 750,000	0.61*
\$30,000 to \$39,999	0.32*	CMA or CA with population 100,000 to 250,000	0.80
\$40,000 to \$49,999	0.42*	CA with population 10,000 to 100,000	0.80
\$50,000 to \$59,999	1.00	Rural areas and small towns	1.00
\$60,000 to \$79,999	1.00	Time since immigration	
\$80,000 to \$99,999	1.71*	Less than 5 years	0.18*
\$100,000 or more	1.72*	5 to 9 years	0.29*
Highest level of educational attainment		10 to 24 years	0.61*
No secondary diploma	0.84*	25 to 39 years	0.79
Secondary completion	0.83	Born in Canada	1.00
College or trade diploma	1.08	Household living arrangements	
University degree	1.00	Married without children	0.33*
Main activity during the previous 12 months		Common-law union without children	0.20
Permanent employment	1.00	Married with children	1.00
Self-employed	1.58*	Common-law union with children	0.36*
Temporary employment	0.58*	Lone parent	0.28*
Looking for work	0.20*	Alone	0.21*
Student	0.28*	Other	0.08*
Caring for children/keeping house	0.90	Age	1.05*
Other activity	0.55	Sex	
		Women	1.00
		Men	0.90

1. Age of departure squared allows us to see the non-linear relationship between age of departure and the probability of being a homeowner in one's thirties.

2. CMA = Census Metropolitan Area; CA = Census Agglomeration.

* Statistically significant difference from the reference group shown in *italics* ($p < 0.05$).

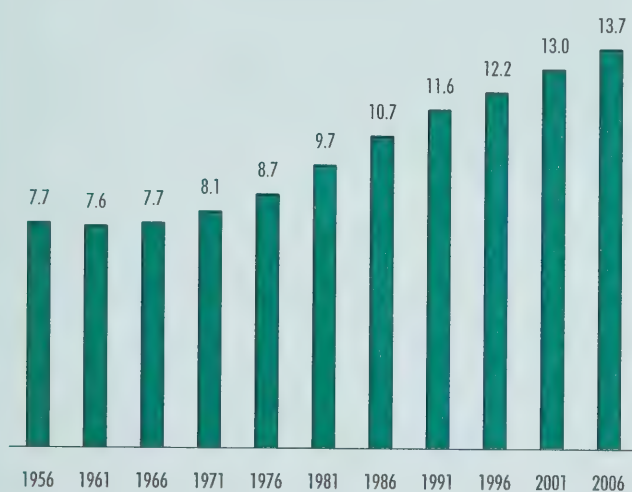
Source: Statistics Canada, General Social Survey, 2006.

CST Census snapshot of Canada — Population (age and sex)

The census is the richest source of information on the social, cultural, demographic and economic status of Canadian society. Canadian Social Trends will be highlighting some of the key trends observed in data released from the 2006 Census.

Data from the latest census confirm that the Canadian population is aging rapidly. There were, for example, over 4.3 million Canadians aged 65 and over in 2006, a 12% increase since 2001. In fact, the growth rate in the number of seniors was more than double the rate of overall population increase (5%) in the previous five years. As a result, people aged 65 and over made up almost 14% of Canada's population in 2006, up from just under 10% in 1981.

% of the population who are 65 or older



Source: Statistics Canada, Censuses of Population, 1956 to 2006.

As well, older seniors make up the fastest growing segment of the 65-plus population in Canada. In 2006, for example, over a half million Canadians were aged 85 and over, up 25% from 2001. As a result, those aged 85 and over currently represent around 12% of the overall senior population in Canada, up from 8% as recently as 1986.

Given this trend, it is not surprising that there has also been a substantial increase in the number of centenarians living in Canada. At the time of the 2006 Census, there were 4,635 Canadians aged 100 or older, 22% more than there were in 2001.

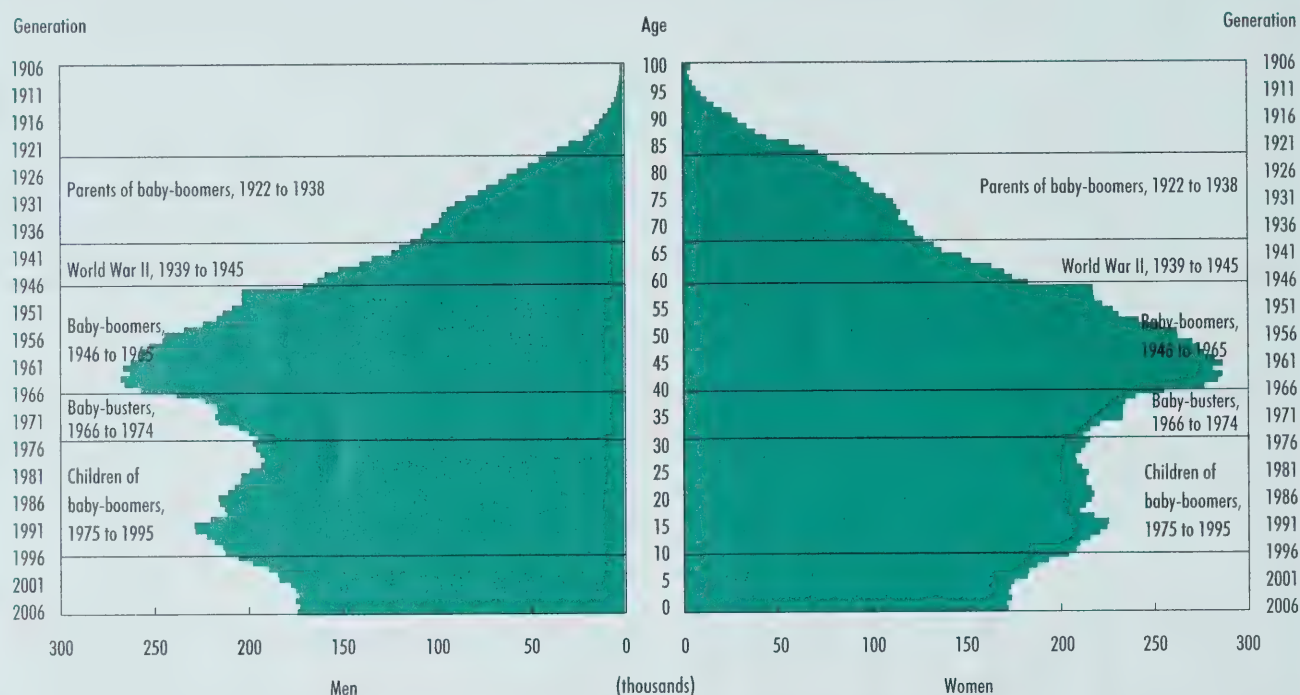
Women also continue to make up the majority of the senior population in Canada. In 2006, 56% of all Canadians aged 65 and over were female. As well, the share of the seniors' population accounted for by women rises substantially with age. In fact, women currently make up almost 70% of all those aged 85 and over.

While the growing number of seniors tends to attract most of the newspaper headlines, the working population is also aging rapidly. In 2006, baby-boomers, people born between 1946 and 1965, were between ages 41 and 60 and they still remained the largest population cohort in Canada. As a result, the fastest growing 10-year age cohort in the country between 2001 and 2006 was aged 55 to 64. Indeed, this pre-retirement age group grew by 28%, a rate of growth more than five times the national average. In contrast, the population aged 15 to 24 increased by only 5% in the same period. In fact, the 2006 Census shows that there are barely enough young people entering the working age group to replace those approaching retirement; just 1.1 persons 15 to 24 for every person aged 55 to 64, compared with 2.3 in 1976. As well, projections show that in about 10 years, Canada may have more people at retirement age than people at the age where they can begin working. An aging working-age population presents considerable challenges for Canadian employers who will have to adjust to a high rate of employee turnover, employee retention, health of older workers and continuous training of employees.

As the baby-boomers aged, moving out of the 30 to 39 age group, the smaller-sized baby-bust cohort replaced them in this age group. This is the age at which women have most of their children. It is, therefore, not surprising that the number of children under age 15 has decreased since 1996 and that they now account for only 18% of the population in 2006, a 50-year low.

Overall, the age distribution in the provinces generally follows the national pattern. The populations of the three Prairie Provinces, though, tend to be somewhat younger, on average, than the rest of the country. In 2006, close to 20% of the populations in each of Manitoba, Saskatchewan and Alberta were under the age of 15, whereas the figure in the remaining provinces averaged around 17%. Alberta is also characterized by a relatively small senior population. That year, just 11% of Alberta residents were aged 65 or over, while in the other provinces the figure was either 14% or 15%.

Age pyramid of the Canadian population in 2006



Source: Statistics Canada, Census of Population, 2006.

The territories are also characterized by relatively young populations. In 2006, one in four residents of the Yukon, Northwest Territories and Nunavut was under the age of 15, compared with 18% nationally. At the same time, seniors made up only 5% of residents of the three territories compared to 14% nationally.

For more information on census population age and sex counts, or about the Census in general, visit the Census website at <http://www12.statcan.ca/english/census/index.cfm>.

The richest source of information on the social, cultural, demographic and economic status of Canadian society is the census which is conducted every five years. Canadian Social Trends will be highlighting some of the key trends observed in data released from the 2006 Census.

Data from the 2006 Census indicate that the large majority (84%) of the population still live in census families¹, while 11% live alone and 5% live with others including relatives and non-relatives. The characteristics of families in Canada continue to change as growth between 2001 and 2006 varied by family structure. Overall, families grew in number by 6% over this period, but common-law couple families grew by 19%, lone-parent families by 8% and married couple families grew by 4%.

Still, in 2006, married-couple families made up 69% of all families in Canada, while common-law couples and lone parents each represented 16% of all families. In comparison, two decades ago, common-law-couple families accounted for only 7% of all census families and lone-parent families made up 13%.

Common-law couples account for a particularly large share of all families in Quebec. In 2006, 29% of all families in Quebec were common-law couples whereas in the remaining provinces the figure ranged from 14% in New Brunswick to just 10% in both Ontario and Prince Edward Island. As a result, Quebec accounted for 44% of all common-law-couple families in Canada in 2006.

Common-law couples also make up a higher share of all family units in the three territories. In fact, in 2006, over one in four families in the Yukon, Northwest Territories and Nunavut were headed by a couple living in a common-law relationship. At the same time, lone-parent families also constitute a relatively large share of families in the territories. That year, almost one in four (23%) of all families in the territories were headed by a lone parent. In contrast, the share of all families headed by a lone parent was fairly close to the national rate in all ten provinces, with the figure ranging from 17% in Nova Scotia, Quebec and Manitoba to 14% in Alberta.

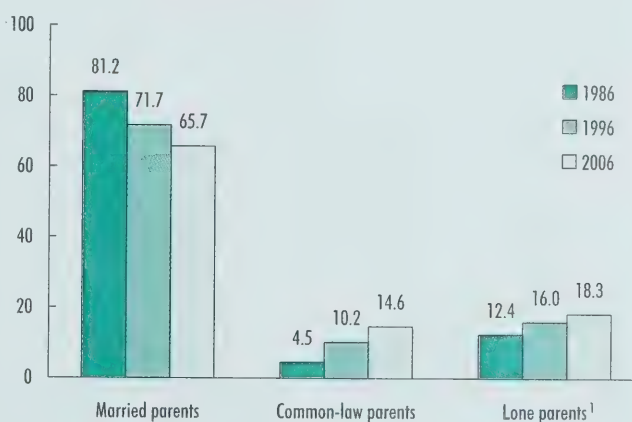
Growth among lone-parent families headed by men exceeded that for such families headed by women. Between 2001 and 2006, for example, the number of male-headed lone-parent families increased by 15%, compared with just

6% among those headed by women. In 2006, women still made up the large majority (80%) of lone parents in Canada. That year, there were a total of 1.1 million female-headed lone-parent families in Canada, which have historically been among the most economically disadvantaged families in the country. While the overall growth rate in the number of lone-parent families has moderated in the past decade, these families continue to account for a relatively large share of all children in Canada. For example, 18% of all children under age 15 lived with a lone parent.

For the first time, Canada had more couples without children than with children. In 2006, 41% of families were couple families who had children while 43% of families were couple families without children. The latter includes couples whose children have left the home, an increasing trend with the aging baby-boom generation. Twenty years earlier, 52% of families were couples with children.

With the rapid increase in common-law couple families, a growing proportion of children under age 15 lived with common-law parents. In 2006, 15% of children under age 15 who lived in private households lived with common-law parents, up from 5% twenty years earlier. In 2006, the majority of children (66%) still lived with married parents while 18% lived with a lone parent.

% of children under age 15 living with parents

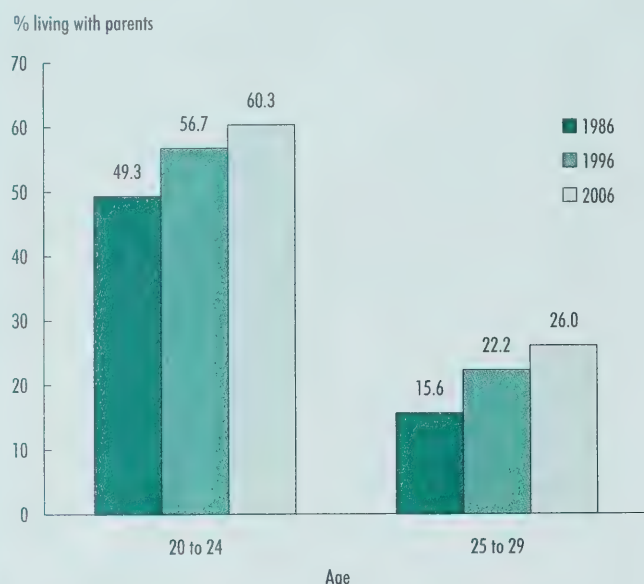


1. Historical comparisons for census families, particularly lone-parent families, must be interpreted with caution due to conceptual changes in 2001.

Note: A small percentage (2.1% or less) of children are counted in the 'other' category and are not shown on this chart.

Source: Statistics Canada, Censuses of Population, 1986, 1996 and 2006.

The latest census also confirmed the long-term trend for young adults to either remain in, or return to, the parental home. In fact, in 2006, 44% of all young adults aged 20 to 29 were living in their parental home, up from 41% in 2001 and 32% in 1986.



Source: Statistics Canada, Censuses of Population, 1986, 1996 and 2006.

Data from the latest census also showed a substantial rise in the number of same-sex couples in Canada. In 2006, there were just over 45,000 same-sex couples in Canada, up 33% from 2001. This was over five times the growth rate of opposite-sex couples, the number of which rose by 6% in the same period. That year, same-sex couples made up just under 1% of all Canadian families, a figure comparable with other industrialized nations which collect such data. As well, just under half of all same-sex couples in Canada lived in the census metropolitan areas of Toronto (21%), Montréal (18%), and Vancouver (10%).

The 2006 census also counted same-sex married couples for the first time, reflecting the legalization of same-sex marriages for all of Canada as of July 2005. Overall, 17% of same-sex couples were married couples.

For more information about families and households from the 2006 Census, or about the Census in general, visit the Census website at <http://www12.statcan.ca/english/census/index.cfm>.

1. A census family is composed of a married or common-law couple with or without children, or a lone parent living with at least one child in the same dwelling.



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Life in metropolitan areas

The city/suburb contrast: How can we measure it?

by Martin Turcotte

Like many other industrialized countries, Canada is a very highly urbanized nation. In 2006, just over 80% of the population was living in urban areas, and roughly two thirds of Canadians were living in a census metropolitan area. The social phenomena, dynamics and issues that affect these large and sometimes very large urban areas touch the everyday lives of many people.

In a new series of articles, *Canadian Social Trends* is planning to address a number of subjects related to life in metropolitan areas. We will attempt to shed some light on the differences and similarities between Canada's major census metropolitan areas (CMAs), focusing on their component neighbourhoods and districts. Specifically, we will contrast neighbourhoods that have typically urban traits with neighbourhoods that have characteristics more typical of the suburbs or suburban areas. In so doing, we will compare central neighbourhoods and more peripheral neighbourhoods, as well as high-density and low-density neighbourhoods. We will also refer to

concepts such as the city centre, the central municipality and the suburban municipality.

All these concepts are important in distinguishing between qualitatively different districts within urban areas – different not only in form but also in the types of people and households that comprise them. Since these concepts can be confusing and are not commonly used, they should be defined as clearly as possible. That is the main objective of this article.

In the first part, we will explore four possible approaches to the question of differentiating urban from suburban neighbourhoods. In the second part, we will use census data and selected classification tools to show how the various types of neighbourhoods differ in terms of the characteristics of their populations. A number of supplementary text boxes also describe alternative approaches which, though not detailed, may prove useful in identifying other differences between neighbourhoods.

Two geographic concepts that are of great importance – census metropolitan area (CMA) and census

tract (CT) – are defined briefly in the text box entitled "Statistics Canada's standard geographic definitions". It should be noted that at present, Statistics Canada does not have a classification that differentiates between districts or neighbourhoods within CMAs. While the various approaches presented in this article suggest directions that may eventually lead to the development of such a typology, they should not be regarded as standard classifications at this time.

To be or not to be a suburb: A question without an answer?

Both in everyday speech and in urban research, we often refer to suburbs as opposed to the city, urban neighbourhoods or the city centre. It is probably clear in the minds of most people who live in one of Canada's urban areas whether they live "in the city" or "in the suburbs". Yet the concepts of suburb and city are seldom understood in the same way by everyone and are sometimes used very loosely.

Census metropolitan area (CMA)

A CMA is an area consisting of one or more adjacent municipalities situated around a major **urban core**. A CMA must have a population of at least 100,000, and the urban core must have a population of at least 50,000.

The **urban core** is a large **urban area** around which the boundaries of a CMA or a census agglomeration (CA) are defined. An **urban area** is an area with a population of at least 1,000 and no fewer than 400 persons per square kilometre.

Canada currently has 33 CMAs, up from 27 in 2001. The eight largest CMAs, in descending order by population size, are Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Québec City, and Winnipeg.

For more details, please visit the following Web page: <http://www12.statcan.ca/english/census06/reference/dictionary/geo009a.cfm>

Census tract (CT)

A CT closely matches what most people consider to be a neighbourhood. When we refer to the concept of a neighbourhood in this series, we will be referring indirectly to the concept of a CT.

CTs are small, relatively stable geographic areas that usually have a population of 2,500 to 8,000 people. They are located in CMAs with an urban core population of 50,000 or more as determined in the previous census. Within each CMA,

a committee of local specialists (planners, health and social workers, and educators) delineates CTs in conjunction with Statistics Canada. At the time of its creation, the CT is defined so as to ensure that the population is as homogeneous as possible in terms of socio-economic characteristics, such as similar economic status and social living conditions. In addition, the shape of a CT is as compact as possible, with its boundaries following permanent, easily recognizable physical features.

Note to readers

It is important to note that the standard Statistics Canada classification concepts of urban core, urban fringe and rural fringe are not retained in this discussion because they do not allow us to distinguish in sufficient detail between the different areas of an urban region – one of the most important objectives of this series. For example, in 2006 in the CMA of Vancouver, 92% of the total population lived in an area classified as urban core (the remaining 8% belonged to the urban and rural fringes). But this extensive urban core includes both business districts and peripheral residential neighbourhoods, areas which have very little in common. The situation is similar, if not almost identical, in other CMAs. In short, readers should be careful not to confuse the concepts discussed here with the urban core/urban fringe/rural fringe classification.

The central municipality can be differentiated from the suburbs in a number of ways. We will try to impose some order on these ideas by presenting four ways of categorizing them, based on four criteria for delineation: 1) administrative or political boundaries; 2) the boundaries of the city's centralcore, not to be confused with the urban core, which is defined in "Statistics Canada's standard geographic definitions"; 3) distance from the city centre; and 4) neighbourhood density. As we will see, each one has its strengths and weaknesses.

Administrative or political boundaries: the central municipality and the suburban municipalities

In the first and probably most common method of delineating the centre from the suburbs, the municipality that lends its name to a metropolitan area is regarded as the central municipality, while all the other municipalities, towns and localities in the metropolitan area form the suburbs.¹ From this perspective, the suburbs have some degree of political autonomy (for example, a mayor and elected representatives) even though they are

referred to as suburban municipalities of the central municipality.²

Two advantages of this method are its simplicity and the possibilities it offers for the analysis of local and metropolitan policies. For example, someone may wonder whether a larger number of suburban municipalities in a CMA are producing different urban development policies from those adopted by a smaller number of municipalities. Another advantage is that people generally recognize fairly readily the territorial boundaries of the municipalities in their region and can identify their own municipality. However, this first approach presents

some significant disadvantages for the analytic and comparative perspective developed in this series, and it will not be used very often.

The biggest drawback is probably the fact that the central municipality's administrative boundaries can provide an inaccurate picture of the forms of urban development in a CMA. In some CMAs, people who live a dozen kilometres from the city centre, in neighbourhoods that have all the qualities of traditional suburban neighbourhoods, are nevertheless residing in the central municipality. Conversely, in other CMAs, people living only a few kilometres from the central business district, in very densely populated neighbourhoods, are regarded as living in a suburban municipality. The reason for these differences is that municipal history, and therefore municipal administrative boundaries, vary substantially from CMA to CMA. As a result, the percentage of the CMA's total population living in the

central municipality as opposed to the suburban municipalities will also vary a great deal from one metropolitan area to another (Chart 1).

For example, according to 2006 Census data, Calgary's seven suburban municipalities accounted for only 8% of the CMA's total population. The same was true for the CMA of Winnipeg, where the suburban municipalities also made up only 9% of the CMA's total population. The situation was completely different in the CMA of Vancouver, where the suburban municipalities also made up only 9% of the CMA's total population. The situation was completely different in the CMA of Vancouver, where 73% of the total population lived in the suburban municipalities.

While the difference in the percentages provides some idea of the extent of administrative fragmentation in these metropolitan areas, it tells us very little about the types of neighbourhoods in which Calgary and Winnipeg residents live compared with Vancouver residents. In addition, comparing the central municipalities of the various CMAs can lead to serious misinterpretations if we fail

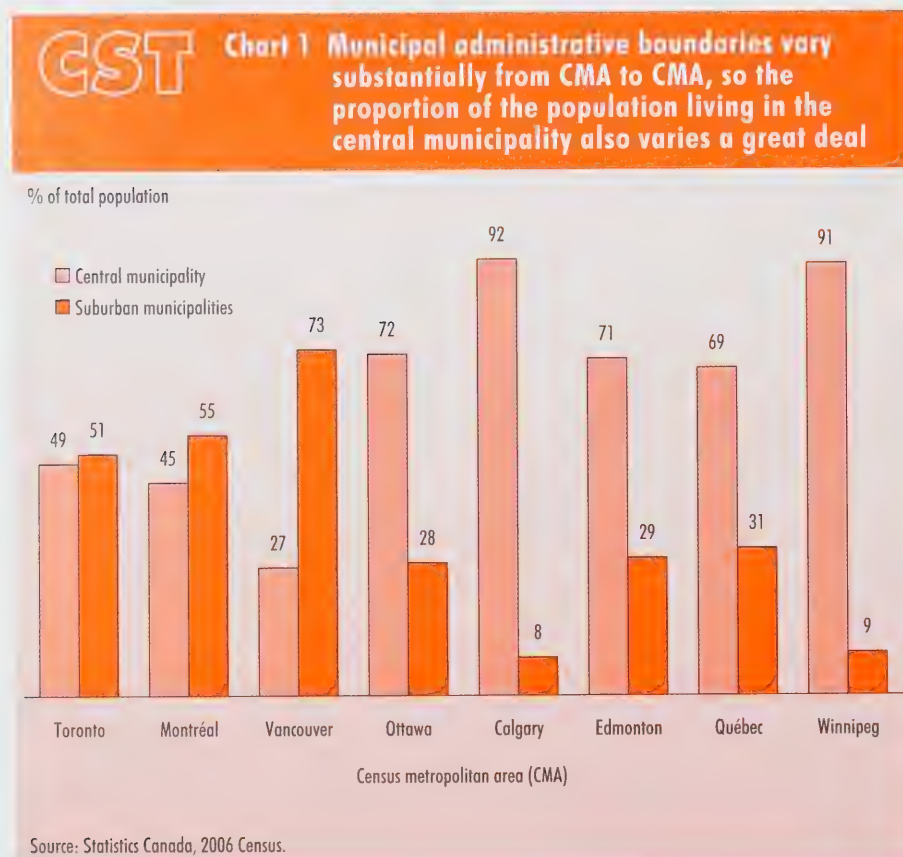
to take into account how each one is divided.³

A second major disadvantage of the approach based on the central municipality's administrative boundaries, in terms of sociological and geographic analysis of CMA populations, is that boundaries can change abruptly at any time, especially during municipal mergers or reorganizations. Neighbourhoods and localities that had long been considered suburbs can suddenly become part of the central municipality, even though there has been no substantive change in their areas' nature or their social and economic ties to the centre.

For example, the town of Pierrefonds is now included in one of the wards of the new municipality of Montréal, although it was considered an independent suburban municipality before the municipal mergers of 2001. The same thing happened to the Borough of East York in the CMA of Toronto: before 1998 it was a suburb and today it is an integral part of the central municipality. In the Ottawa area, the former suburban municipalities of Kanata, Orléans, Gloucester, Vanier and Rockcliffe are now part of the central municipality. Of course, it is always possible that further municipal reorganizations will occur in the future, making the distinction between central and suburban municipalities even fuzzier than it is now.

Yet, despite these limitations (particularly from the perspective of comparing CMAs), the distinction between central and suburban municipalities remains, for some purposes, the most pertinent and useful way to present various statistics. It is important for decision-makers and policy-makers to have a variety of demographic and socio-economic information about the population of their own municipality as well as adjacent municipalities.

On the other hand, the approach based on the administrative or political boundaries of the central municipality is probably not the



most appropriate for studying certain social, demographic and economic differences between suburban and urban neighbourhoods.

Suburbs as zones outside the city's central core

A second approach to delineating and categorizing the residential parts of urban areas involves classifying neighbourhoods and localities on the basis of whether they are part of the *city's central core* (commonly known as the "inner city") and perhaps how far they are from the city's central core. In this approach, a locality, a neighbourhood or some other geographic entity situated outside the core (or more than a specified distance from the core) will be considered part of the suburbs.

But how do we delineate this central core? Although there are several options, one in particular has been used by geographers in the past: it defines the city's central core as consisting of the central business area of the municipality that lends its name to the CMA plus the adjacent old residential neighbourhoods.⁴

In general, the central business district or business centre, especially in the largest CMAs, is the neighbourhood in which the bulk of the service sector activities are concentrated, particularly management, finance and business services.⁵ More broadly, the city centre is the neighbourhood that contains (or used to contain in the case of those CMAs where other business centres have grown up on the periphery) the heaviest concentrations of commercial and office activity in an urban area.

However, there are no universal criteria for easily, clearly and precisely identifying and marking the inner city boundaries of all CMAs in Canada.⁶ For example, in a study of employment distribution in Canada's four largest CMAs, researchers identified the central business district as consisting of all neighbourhoods having a relatively large number of jobs and a relatively small number of residents.⁷

Other geographers have argued that while central business districts have no formal boundaries, they can generally be identified from the clear predominance of office space over dwellings.⁸ There are also definitions with more formal status; for example, the Charter of the City of Montréal, which establishes the municipality's legal status, explicitly delimits the central business district with specific street names.⁹

Nor is it much simpler to identify the second component of the inner city, that is, the older neighbourhoods adjacent to the central business district. In some studies, older neighbourhoods are defined as those which have a large proportion of dwellings built before a specific date (typically neighbourhoods with many dwellings constructed before 1946). The criteria for determining what constitutes a large proportion of dwellings may vary from study to study.¹⁰

This method of distinguishing between the suburbs and the inner city composed of the city centre and the adjacent older neighbourhoods, however appealing it might be, will not be used in this series of articles. There are simply too many difficulties associated with establishing formal rules for defining the central business district and the adjacent older neighbourhoods in CMAs that differ in history, size and geography.¹¹

The city centre versus the peripheral neighbourhoods

The third approach, which was selected for this series, is different from the previous one in that it does not explicitly distinguish between the central business district, the older neighbourhoods and the suburbs. Instead, it distinguishes between neighbourhoods and residential areas on the basis of their distance from a central location in the city centre. For the purposes of the series, that central location will be the census tract (CT) containing the city hall of the central municipality.

This method, which has been used in a Statistics Canada study of employment and commuting in CMAs,¹² was selected because in the various CMAs, the city hall of the central municipality is usually located where employment is concentrated in the inner city (or at least very close to it) and the city's historical centre. While it is difficult to identify the inner city's most central point (particularly when we are dealing with a number of CMAs, each of which is different), it is safe to say that the location of city hall is a very good approximation.¹³

From that central point, we draw concentric rings of 0 to less than 5 kilometres, 5 to 9 kilometres, and so on. The various neighbourhoods are then categorized according to their distance from the census tract that contains the city hall of the central municipality. The farther out we go, the more peripheral the neighbourhoods are.

Usually, new suburban areas with above-average population growth are in the most peripheral zones of their CMA. However, it is sometimes difficult to measure the extent of such urban growth when all we have is information about population growth in the various municipalities. As mentioned previously, some CMAs have far more peripheral municipalities than others, making the expansion seem more pronounced or less pronounced depending on the way the region is divided administratively. Using distance from the city centre as a criterion helps avoid some of those problems, because the classification can remain constant over time. For example, we can learn how many people in a particular CMA lived in a neighbourhood more than 20 kilometres from the city centre in 2006 compared with 2001.

When we use the classification by neighbourhood distance from the city centre in this series, we will be discussing central neighbourhoods in contrast to peripheral neighbourhoods: the greater the

distance, the more peripheral the neighbourhood.

One of the disadvantages of this method is that there is wide variation in the physical size of CMAs. For example, the total area of the Toronto CMA is about 5,900 square kilometres, compared with 4,200 square kilometres for Montréal and 2,900 square kilometres for Vancouver. In contrast, Victoria encompasses just 700 square kilometres, and Windsor about 1,000 square kilometres. Hence, in the largest CMAs, neighbourhoods that might be considered "central" may be more than 5 kilometres from the city centre. This is not likely to be the case in small CMAs.

Similarly, the percentage of the population living within 5 kilometres of the city centre will generally be greater in small CMAs than in very large CMAs such as Toronto or Montréal. In addition, the population will tend to appear more centrally concentrated in small CMAs. Lastly, the concepts of central and peripheral neighbourhoods will be subject to constant revision: in some cities, neighbourhoods that are considered central today were regarded as peripheral when the cities started to expand. Likewise, today's peripheral neighbourhoods may be viewed as central in a few years.

Consequently, we need to exercise caution in interpreting the differences between a CMA's central and peripheral neighbourhoods. Using 5 kilometres as the width of the concentric rings is arbitrary, as any other distance would be. Nevertheless, as we will see later in some actual examples, there are some very good reasons for using distance from the city centre to identify and study the differences and similarities between neighbourhoods in Canada's central metropolitan areas.

Differentiating neighbourhoods by density and dwelling types

While classifying neighbourhoods by their distance from the city centre may be useful in studying

some subjects, it does conceal differences between the various types of neighbourhoods. Some central neighbourhoods have features that are much more typical of postwar suburban neighbourhoods than of traditional urban neighbourhoods: they have low population density, dwellings that are more typical of suburbs, such as single houses, and so on. Conversely – and this is becoming more common today – some neighbourhoods that are referred to as "suburban" or peripheral neighbourhoods because they are some distance from the city centre have characteristics that are more traditionally associated with central neighbourhoods: relatively high population density, multiethnic population, rental housing, and so on.¹⁴ Increasing the diversity of suburban areas by giving them some of the features of traditional urban neighbourhoods such as higher density and mixed use is an important objective of "new urbanism", a major trend in modern urban planning.¹⁵

To take account of the present and future heterogeneity of peripheral and central neighbourhoods, we will introduce various distinctions based on neighbourhood characteristics in this series. Because we are interested in comparing neighbourhoods that have characteristics typical of modern suburbs with neighbourhoods that have features of more traditional urban areas, population density will be one of the key criteria. Even though some outlying areas have apartment buildings and row houses, low population density is a very important feature of most suburbs of large Canadian cities.¹⁶

Neighbourhood density can be measured in a variety of ways. In the metropolitan areas series, we will refer to a neighbourhood as low density when at least two thirds of the occupied housing stock comprises single and semi-detached houses and mobile homes, that is, dwellings that take up the most space or area per occupant.¹⁷ Conversely, we will refer to neighbourhoods as having

a high density when their housing stock consists primarily of multiple dwellings, condominiums, apartment buildings and row houses. These dwelling types, especially apartment buildings, are all associated with much higher population densities.¹⁸

We could have used what seems at first glance to be a more direct measure of neighbourhood (CT) population density: the number of residents per square kilometre. However, that measure would have presented problems in a number of situations. Some CTs cover a relatively large area, but only a small part of it is residential; the rest may be taken up by industries, natural barriers such as bodies of water, or other activities demanding lots of space like airports. Consequently, even if the population density is fairly high in the residential portion, the CT's overall density may be low, thereby presenting a skewed picture of its density level.

Using the proportion of all occupied dwellings in a neighbourhood that are single houses, semi-detached houses and mobile homes to measure density avoids the methodological pitfall associated with the simple estimate of population per square kilometre. The measure of density based on predominant housing type is not influenced by the proportion of the CT that is truly residential. Moreover, in Canada and North America generally, the presence of single and semi-detached houses in a neighbourhood is an important factor in differentiating between residential suburbs and more urban areas.¹⁹

Examples of the use of density and distance to the city centre to differentiate between neighbourhoods

To illustrate all the concepts discussed above, we have prepared eight maps using 2001 Census data (see Appendix) that can be updated when all 2006 Census data are available. We have also prepared eight data tables, which can be found at www.statcan.ca/english/freepub/11-008-XIE/2008001/article/10459-en.htm, to show how useful it is

to be able to distinguish between neighbourhoods based on housing density and distance from the city centre – at least with regard to the distinctive features of the various types of neighbourhoods.

For demonstration purposes, we created three density categories based on the percentage of the neighbourhood's dwellings that are single or semi-detached houses or mobile homes. High-density neighbourhoods have less than 33.3% of this dwelling type; medium-density neighbourhoods have between 33.3% and less than 66.6%; and low-density neighbourhoods have 66.6% or more.

To separate neighbourhoods by distance to the city centre, we established six categories. Central neighbourhoods are less than 5 kilometres from the city centre. Other neighbourhoods are regarded as peripheral, with the most peripheral being 25 kilometres or more from the city centre.

Nearly half of Canadians in metropolitan areas live in low-density neighbourhoods

Table A.1 shows how the population of CMAs is distributed across the various types of CMA neighbourhoods. For all CMAs combined, nearly half the population in 2001 was living in low-density neighbourhoods, which are most typical of postwar suburbs. In contrast, only one person in five was living in a more typically urban neighbourhood, which is composed primarily of apartment buildings and other types of high-density housing.

However, the proportions varied substantially from CMA to CMA. For example, more than two-thirds of Calgary residents (67%) lived in low-density neighbourhoods, compared with only about one-third of Montréal residents (34%).

The differences between residents of the various CMAs are even more pronounced with respect to the distance between their home

and the city centre. Almost one-third of Toronto residents lived in neighbourhoods 25 kilometres or more from the central municipality's city centre (the CT containing Toronto's city hall); the same was true for only 11% of Ottawa-Gatineau residents and 3% of the residents of Québec City. These differences in the proportion of people living close to or far from the city centre reflect not only the CMA's history and size but also its unique geography. One obvious example is Toronto: being bounded to the south by Lake Ontario, no residential development is possible in that direction.

The maps of Canada's eight largest metropolitan areas (see Appendix) are particularly informative concerning the density and distance indicators. They show that neighbourhood population density generally declines with distance from the city centre (the city centre is marked with a star on the map). In other words, the farther from the centre, the greater the proportion of single and semi-detached houses and mobile homes in the neighbourhood.

The maps show that the correlation between low density and distance from the city centre is not entirely perfect; in most large urban areas, some peripheral neighbourhoods have high residential density, and some central neighbourhoods have low density. To take this into account, we can combine the density and distance indicators into a single indicator that provides additional precision (Table A.1).²⁰ This composite indicator is capable of differentiating between neighbourhoods with the most typically urban features (high-density central neighbourhoods) and those that have two typically suburban traits (peripheral and low density).

Table A.2 uses this composite indicator to illustrate with data what the maps hinted at: that the majority of people (but not everyone) who live in neighbourhoods close to the city centre live in high-density neighbourhoods. This is true in

CST Why have three density categories and not five or six?

Most articles in this series will rely exclusively on survey data rather than census data. Though this point may seem technical and of little consequence, it is actually crucial. Statistics Canada's social surveys have far fewer respondents than the Census: roughly 20,000 for the General Social Survey, compared with the entire population of Canada for the "short" Census and more than 6 million for the more detailed Census questionnaire. The advantage of survey data is that they cover a wider variety of subjects than census data; their disadvantage is that compromises have to be made about the level of geographic detail that can be published when presenting results.

Consequently, it is impossible to generate CMA profiles using survey data that are as detailed as the profiles that could be prepared with census data. One of the main reasons for using three groups to differentiate neighbourhoods by housing density (low, medium and high) is the importance of being able to use the indicator with survey data. In the future, however, we may still conduct analyses based on more detailed density categories when drawing on census data. The same logic applies to the categories for distance to the city centre that we have selected.

most large CMAs, and it is especially evident in Montréal and Québec City. In 2001, 93% of the people who lived less than 5 kilometres from the centre of Montréal and 80% of the people in Québec City's central neighbourhoods were living in high-density neighbourhoods. In contrast, the proportions were 59% for Ottawa-Gatineau and 55% for Toronto.

Conversely, people living in more peripheral neighbourhoods tended to be concentrated in low-density neighbourhoods. In Vancouver, for example, 53% of the people who were living 20 kilometres or more from the city centre were in low-density neighbourhoods. In Toronto and Montréal, the proportions were 72% and 71%, respectively.²¹

The population of low-density peripheral neighbourhoods is different from the population of high-density central neighbourhoods

Geographers and sociologists who study cities have long known that people with similar characteristics tend to gather in the same types of neighbourhoods within the urban space. This is reflected in census data in a number of ways (see Tables A.3 to A.8).

Walking around the central neighbourhoods of large cities, one might get the impression that most residents are couples without children. That impression would not be wrong. For example, in Montréal in 2001, only 38% of households in high-density central neighbourhoods had a child aged 18 or under. The corresponding proportion was 58% in low-density peripheral neighbourhoods at least 20 kilometres from the city centre.

This negative correlation between the presence of young families and the proximity of the city centre is even clearer in Table A.4. The table shows that in Toronto, Montréal and Vancouver, the proportion of children aged 14 and under in neighbourhoods close to the city centre was only about half that in the most peripheral neighbourhoods.

On the other hand, the proportion of seniors is higher in high-density neighbourhoods close to the city centre. For example, in Montréal, which has a higher percentage of renters than any other large metropolitan area in Canada, the proportion of seniors in high-density neighbourhoods was double that in low-density neighbourhoods (16% compared with 8% in 2001). Some elderly people, because of their more limited mobility, may have to live in apartments where some services are more readily accessible. In addition, specialized hospitals tend to be located in the most central neighbourhoods of large cities.

University graduates live more in the city centre

In most CMAs, the proportion of people with a university degree is slightly higher in high-density central neighbourhoods. The farther a neighbourhood is from the centre, the lower the proportion of university graduates. These differences between peripheral and central neighbourhoods are attributable in part to the fact that the most highly skilled, highly paid jobs are concentrated in the centres of large cities.²²

Recent immigrants are more likely to live in high-density neighbourhoods

Recent immigrants, defined here as people who arrived in Canada 10 years or less before the census date, are heavily concentrated in medium-density and high-density neighbourhoods. For example, in the CMA of Toronto in 2001, 28% of residents in high-density neighbourhoods were recent immigrants, compared with only 11% in low-density neighbourhoods. This is no surprise since many studies have shown that recent immigrants tend to settle in neighbourhoods where socio-economic status and housing costs are lower.²³

According to the composite indicator, the overrepresentation of

recent immigrants in medium- and high-density neighbourhoods is the same no matter how far the neighbourhood is from the city centre. In other words, whether they live in the centre or on the periphery of a CMA, recent immigrants have a greater tendency to live in higher-density neighbourhoods than more established immigrants or non-immigrants.

It is worth noting that in Toronto and Vancouver, distance from the city centre has no appreciable effect on the proportion of recent immigrants, except in neighbourhoods that are 25 kilometres or more from the city centre; these more distant neighbourhoods have a lower percentage of recent immigrants. In contrast, the proportion of recent immigrants declines in neighbourhoods that are farther from the city centre in Montréal, Ottawa-Gatineau, Calgary and Edmonton.

New dwellings are concentrated in low-density peripheral neighbourhoods

Data from the 2001 Census suggest that the majority of dwellings built in the 1990s were constructed in peripheral neighbourhoods with low population density (Table A.8). This fact is probably not a surprise since such neighbourhoods have more land available that is suitable for residential developments, which means lower costs. It is nonetheless interesting to note that 60% of all new dwellings built between 1991 and 2001 were constructed in low-density neighbourhoods; the proportion was as high as 88% in the CMA of Calgary. Clearly, urban development in large metropolitan areas continues to follow a pattern of low density and distance from the city centre.

Of course, the tables and maps do not provide a complete picture of the different characteristics of the populations in the various types of CMA neighbourhoods. The main purpose of this discussion was to show that all of the large CMAs exhibit similar patterns of population distribution between neighbourhoods

that are more typically urban (central, high-density) and neighbourhoods that are more typically suburban (peripheral, low-density). The value of differentiating CMA neighbourhoods on the basis of the criteria developed in this article will become much

clearer when we address the various topics in the series. More generally, the use of these classifications will provide a more accurate picture of the extent to which the quality of life of Canadians varies with the types of neighbourhoods in which they live.

Summary and conclusion

In the series of articles on life in metropolitan areas, we will rely on the well-known geographic concepts of census metropolitan area and census tract as well as three major distinctions: central

CST Other possible approaches to classifying neighbourhoods and CMA zones as urban or suburban

In this article, we cannot discuss every imaginable approach to differentiating between suburban neighbourhoods and more urban neighbourhoods. In some cases, we do not have data for all Canadian census metropolitan areas (CMAs). That is why we have discarded approaches that, although interesting from a theoretical standpoint, would be difficult or even impossible to implement at the present time. For example, we could devise a method of differentiating between neighbourhoods on the basis of the diversity of land use, that is, the degree to which residences, stores and places of work coexist in a neighbourhood, instead of the sharp separation of land uses based on predefined neighbourhoods that is typical of traditional suburbs subject to strict zoning regulations.¹ The problem with this approach is that for the moment at least, we have no source of uniform data that might provide information about the diversity of land use for all neighbourhoods in all CMAs.

Other ways proposed by experts for distinguishing between urban and suburban include road configuration (a grid structure typical of urban neighbourhoods, or curving streets with dead-ends), proximity to or distance from daily shopping outlets (grocery stores, etc.), access to public transportation, and even residents' perceptions of their own neighbourhood as urban or suburban.² Data that could be used to measure these factors in every census tract in Canadian CMAs simply do not exist.

Finally, one more approach is worth mentioning. It has been set aside (at least for now) not because there are no data but because substantial research would have to be done before it could be implemented. In this method, whose main ideas were formulated by an American geographer,³ the historical urban centre of a CMA (the traditional urban neighbourhoods) consists of the urban core before the period of intensive suburbanization of urban populations began in about 1945. Suburbs are the zones that have been added to that original

urban core in the last 50 years. Depending on one's objectives, one could identify the initial suburbs as areas added to the urban core between 1951 and 1981, and the new suburbs as areas added to the urban core since 1981.

There is a chance that this methodology will be developed and used in this series on metropolitan areas. For the moment, all we can do is point out that it exists. It is also worth noting that the method would be valid only for CMAs that existed 50 years ago and for which we know the boundaries of the urban core in 1951. Generally speaking, these would be the largest CMAs.

Other features that can be used to differentiate neighbourhoods

In articles later in the series, we will be focusing on other characteristics of neighbourhood populations. The main point behind presenting data from different perspectives is to enhance and complement the information available for CMAs as a whole. For some subjects, it may be that distance to the city centre is simply not a relevant indicator and that the analysis will only consider neighbourhoods' socio-economic or historical characteristics.

1. According to numerous studies and authors, the level of mixed usage in neighbourhoods could have an impact on the quality of the environment, social vitality of the neighbourhood and public health. The urbanist and economist Jane Jacobs probably made the most well-known argument for the positive effect of diversity on the cohesion and vitality of urban neighbourhoods in the classic *The Death and Life of Great American Cities*. For examples of studies that address the relationship between urban diversity, quality of the environment and public health, see Frumkin, H., Frank, L. and Jackson, R. (2004). *Urban Sprawl and Public Health*. Washington: Island Press.
2. Bagley, M.N., Mokhtarian, P.L. and Kitamura, R. (2002). A methodology for the disaggregate, multidimensional measurement of residential neighbourhood type. *Urban Studies*, 39(4), 689-704.
3. Morrill, R.L. (1995). *Metropolitan and Non-metropolitan Areas: New Approaches to Geographical Definition*. Dahmann, D.C. and Fitzsimmons, J.D. (eds.). Working paper no.12. Washington, D.C.: US Bureau of the Census.

The primary aim of the articles in this series is not to document the patterns of population growth or decline in large urban areas. That information is available in other Statistics Canada publications.¹ However, the idea that metropolitan areas grow and develop in different ways will inform a number of articles in the series. For that reason, it is worth exploring those concepts which, like suburb and city centre, are understood differently by different people.

Many experts and commentators, in North America at least, attribute a rather negative connotation to the concept of urban or suburban sprawl.² Even though there are many different points of view on the subject, urban sprawl is generally portrayed as a form of disorderly and excessive urban expansion characterized by encroachment on agricultural land, very high dependence on cars, and the development of new neighbourhoods with low population density and low land-use diversity with homes in some neighbourhoods and stores and services in others.³

The concept of urban sprawl will not be used much in this series, precisely because of the negative connotations associated with it. Instead, we will generally use the term

urban expansion, a process by which the area of inhabited land within a CMA increases as its population grows or as peripheral municipalities become part of the CMA because of stronger economic and social ties with the urban core.

The concept of urban expansion is not associated with a particular form of urban development, as is often the case for the concept of urban sprawl. In some urban areas, new neighbourhoods may have a higher population density, greater diversity of land use and more extensive use of public transportation. In short, the concept of urban expansion may include both these forms of development and the forms of development that are more typical of postwar urban sprawl in North America. Urban expansion generally goes hand in hand with urban population growth.

1. Statistics Canada. (2007). *Portrait of the Canadian Population*. Catalogue no. 97-550-XIE. Ottawa: Minister of Industry.
2. See, for example, Bruegmann, R. (2005). *Sprawl – A compact history*. Chicago: The University of Chicago Press. Also Brueckner, Jan K. (2000). Urban sprawl: Diagnosis and remedies. *International Regional Science Review*, 23(2), 160-171.
3. Duany A., Plater-Zyberk, E. and Speck, J. (2000). *Suburban Nation – The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press; Brueckner. (2000).

and peripheral neighbourhoods, high-density and low-density neighbourhoods, and central and suburban municipalities.

We will define the most central neighbourhoods as those which are close to the census tract where the city hall of the central municipality is located, and the most peripheral neighbourhoods as those which are farthest from that central location.

High-density neighbourhoods will be neighbourhoods composed of a high proportion of apartment buildings or row houses. Low-density neighbourhoods will be neighbourhoods in which most of the dwellings are single houses, semi-detached houses or mobile homes. These are the most common types of housing in postwar suburbs.

The central municipality is the municipality that lends its name to the CMA, and all other

municipalities in the CMA are suburban municipalities.

Much has been said of the fundamental differences between urban and suburban neighbourhoods or central and peripheral neighbourhoods: different quality of life, clearly distinct socio-demographic and economic profiles, differing values, and so on. Yet we seldom have solid data that could be used to determine whether these putative differences are myth or reality. And when such data are available, we sometimes have trouble distinguishing clearly between urban and suburban areas because we lack clear definitions or concepts for delineating them.

A key objective of this series is to remedy these two deficiencies, first by using Statistics Canada's different data sources to test different hypotheses, and second by relying on the classifications presented in

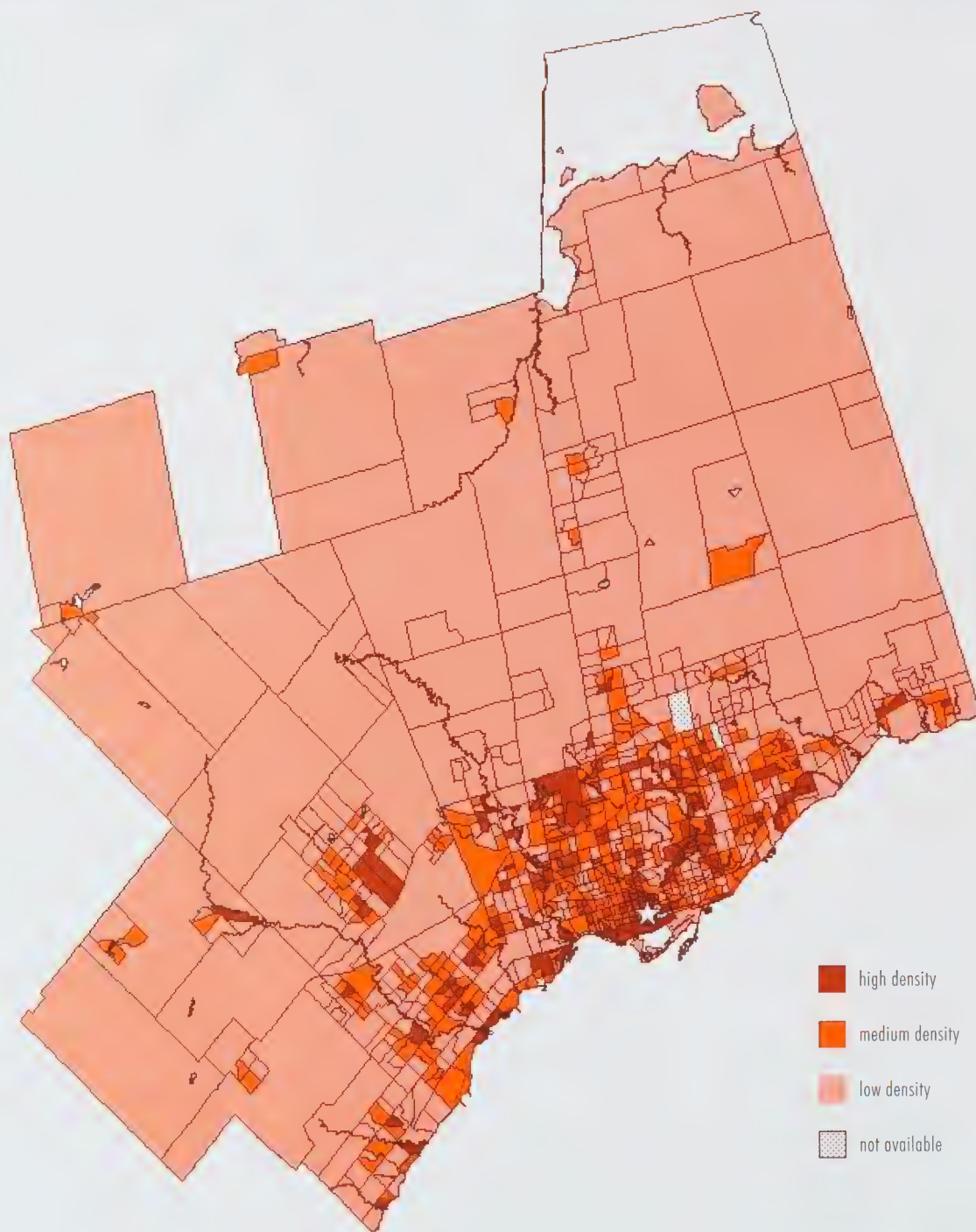
this article. Notwithstanding the form and content of this article, the ultimate aim of this series is not methodological. Rather, it is to shed new light on the quality of life of the ever-growing numbers of Canadians who live in the various neighbourhoods of large urban areas.

CST

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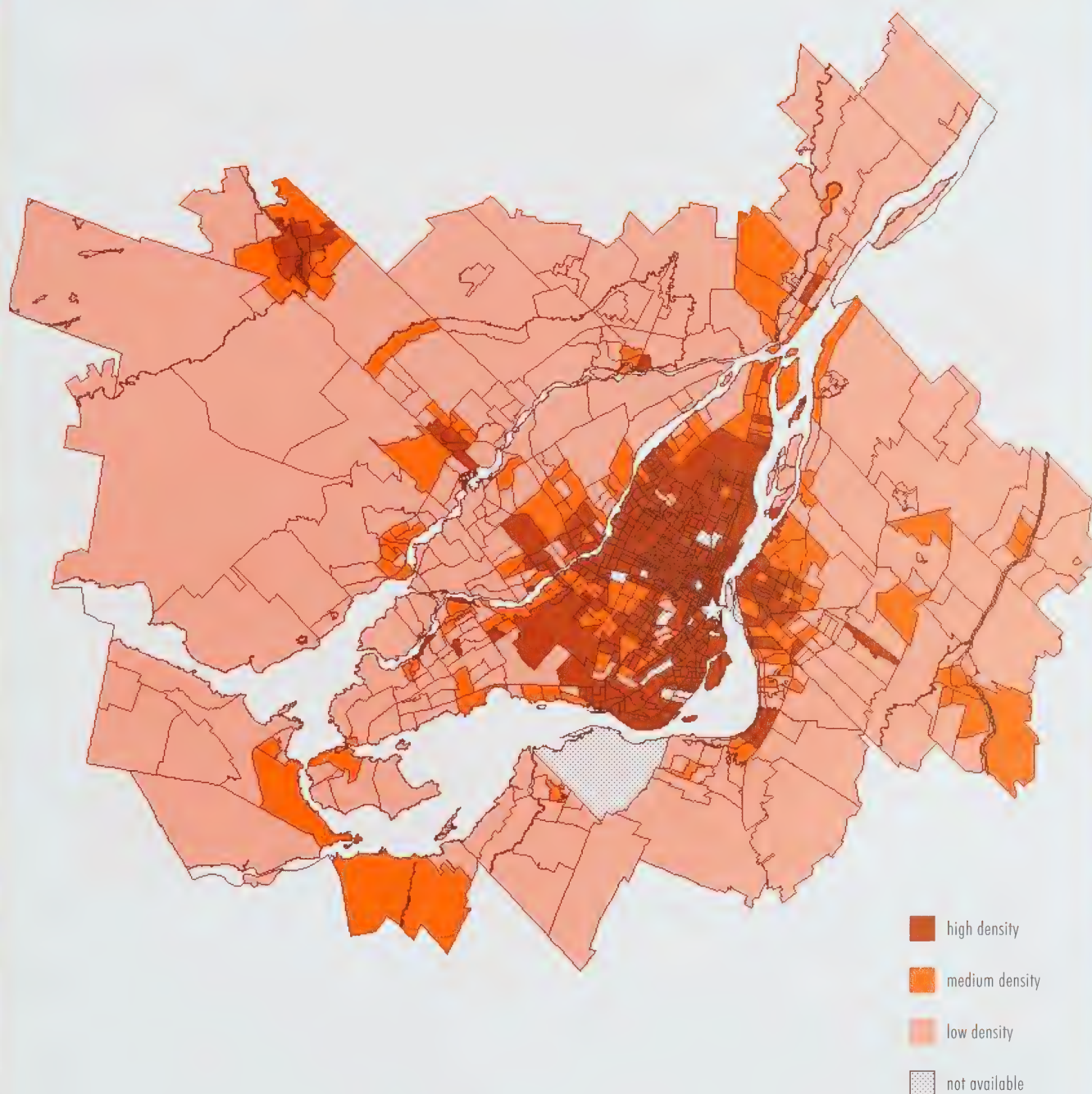
1. These localities have many different names: village, town, municipality, city, municipal district, Indian reserve, parish, etc. We sometimes refer to these geographic entities as census subdivisions.
2. Encyclopedia of Human Geography.

3. Parr, John B. (2007). Spatial definitions of the city: four perspectives. *Urban Studies*, 44(2), 381-392.
4. Ley, D. and Frost, H. (2006). The inner city. *Canadian cities in transition* (3rd ed.) (pp. 192-210). Don Mills: Oxford University Press; Broadway, M.J. and Jesty, G. (1998). Are Canadian inner cities becoming more dissimilar? An analysis of urban deprivation indicators. *Urban Studies*, 35(9), 1423-1438.
5. Polèse, M. (1994). *Économie urbaine et régionale – Logique spatiale des mutations économiques*. Paris: Economica.
6. Ley and Frost (2006).
7. Shearmur, R. and Coffey, W.J. (2002). A tale of four cities: intrametropolitan employment distribution in Toronto, Montreal, Vancouver and Ottawa-Hull, 1981-1996. *Environment and Planning A*, 34, 575-598.
8. Charney, I. (2005). Property developers and the robust downtown: the case of four major Canadian downtowns. *The Canadian Geographer/Le Géographe canadien*, 49(3), 301-312.
9. The Charter of Montreal is available on the Government of Quebec publications website at http://www.publicationsduquebec.gouv.qc.ca/accueil_fr.html.
10. See, for example, Bunting, Walks and Filion. (2004). The uneven geography of housing affordability stress in Canadian metropolitan areas. *Housing Studies*, 19(3), 361-393. They consider a neighbourhood to belong to the urban core if it contains 1.5 times more housing built in 1946 or earlier, as compared to the proportion of total housing in the CMA. See also Walks, R.A. (2005). The city-suburban cleavage in Canadian federal politics. *Canadian Journal of Political Science*, 38(2), 383-413. This author defines urban core neighbourhoods as contiguous neighbourhoods in areas where the majority of housing was constructed before 1946.
11. This is especially true for certain neighbourhoods where the decision to classify them as part of the urban core or as suburbs would have to be made on a case-by-case basis; for example, neighbourhoods that are very centrally located but where the housing is of recent construction, meaning that they cannot formally be considered « old » neighbourhoods.
12. Heisz, A. and Larochelle-Côté, S. (2005). *Work and Commuting in Census Metropolitan Areas, 1996 to 2001*. Statistics Canada Catalogue no. 89-613-MWE. Ottawa: Minister of Industry. For an example of another study using a similar approach based on distance to the city centre, see Boehm, T. and Ihlanfeldt, K. (1991). The revelation of neighborhood preferences: an *n*-chotomous multivariate probit approach. *Journal of Housing Economics*, 1, 33-59.
13. Note that we also could have used the census tract with the most jobs in the central employment cluster to identify the central location of the city centre (based on the method used by Shearmur and Coffey; see note 7). However, this method would have produced very similar results since the census tract containing the most employment in the city centre is generally very close to the census tract where the city hall for the central municipality is located; in Montreal and Calgary, for example, the CT containing the city hall is adjacent to the CTs containing the highest concentration of employment. In certain cases, the CT of the city hall and the CT of highest employment are one and the same (the CMAs of Ottawa, Hamilton, Halifax and Victoria, for example).
14. See, for example, Smith, P. J. (2006). Suburbs. *Canadian Cities in Transition* (3rd) (pp. 211-233). Don Mills: Oxford University Press; Ray, B.K., Halseth, G. and Johnson, B. (1997). The changing 'face' of the suburbs: issues of ethnicity and residential change in suburban Vancouver. *International Journal of Urban and Regional Research*, 21(3), 75-99.
15. Gordon, D. and Vipond, S. (2005). Gross density and new urbanism. *Journal of the American Planning Association*, 71(1), 41-54.
16. Harris, R. (2004). *Creeping Conformity – How Canada became suburban*. Toronto: Toronto University Press.
17. It is important to note that mobile homes account for only a small minority of the housing stock. In 2001, only about 1% of all Canadians were living in a mobile home.
18. For example, even though only 38% of households in the city of Ottawa live in a single family home, single family dwellings occupy 70% of residential land in the urban area. In contrast, apartment buildings occupy only 7% of residential land but house 35% of households. In other words, "apartment buildings provide accommodation for almost as many households as single family dwellings, but they occupy ten times less land." Source : City of Ottawa, http://www.ottawa.ca/city_services/statistics/counts/land_use/index_fr.html, (Accessed August 15, 2007.)
19. Researchers interested in the criteria that determine whether a locality constitutes a suburb or not have often considered that one of the most important factors was the low density of development, typically indicated by single family homes or detached houses. See, for example, Harris (2004).
20. This approach addresses some of the concerns of researchers who think that using a single criterion (density, diversity or distance) to differentiate traditional from suburban neighbourhoods is limiting and perhaps misleading because a neighbourhood could appear to be urban along one dimension but more suburban along another. For more details, see Bagley, M.N., Mokhtarian, P.L. and Kitamura, R. (2002). A methodology for the disaggregate, multidimensional measurement of residential neighbourhood type. *Urban Studies*, 39(4), 689-704.
21. It is important to note that the category of high-density neighbourhoods may include neighbourhoods where the density of the population per square kilometre varies considerably depending on the CMA. In the large CMAs like Toronto, Montreal and Vancouver, some high-density neighbourhoods are composed of high-rise apartment buildings (mainly downtown). In these cases, the level of population density per square kilometre may not be comparable to those observed elsewhere. In contrast, in the smaller CMAs, high-density neighbourhoods consist mainly of low-rise apartment buildings. Consequently, caution must be exercised when comparing the population of high-density neighbourhoods in the different CMAs.
22. Heisz and Larochelle-Côté (2005).
23. Massey, D. S. and Denton, N.A. (1985). Spatial assimilation as a socioeconomic outcome. *American Sociological Review*, 50, 94-106.



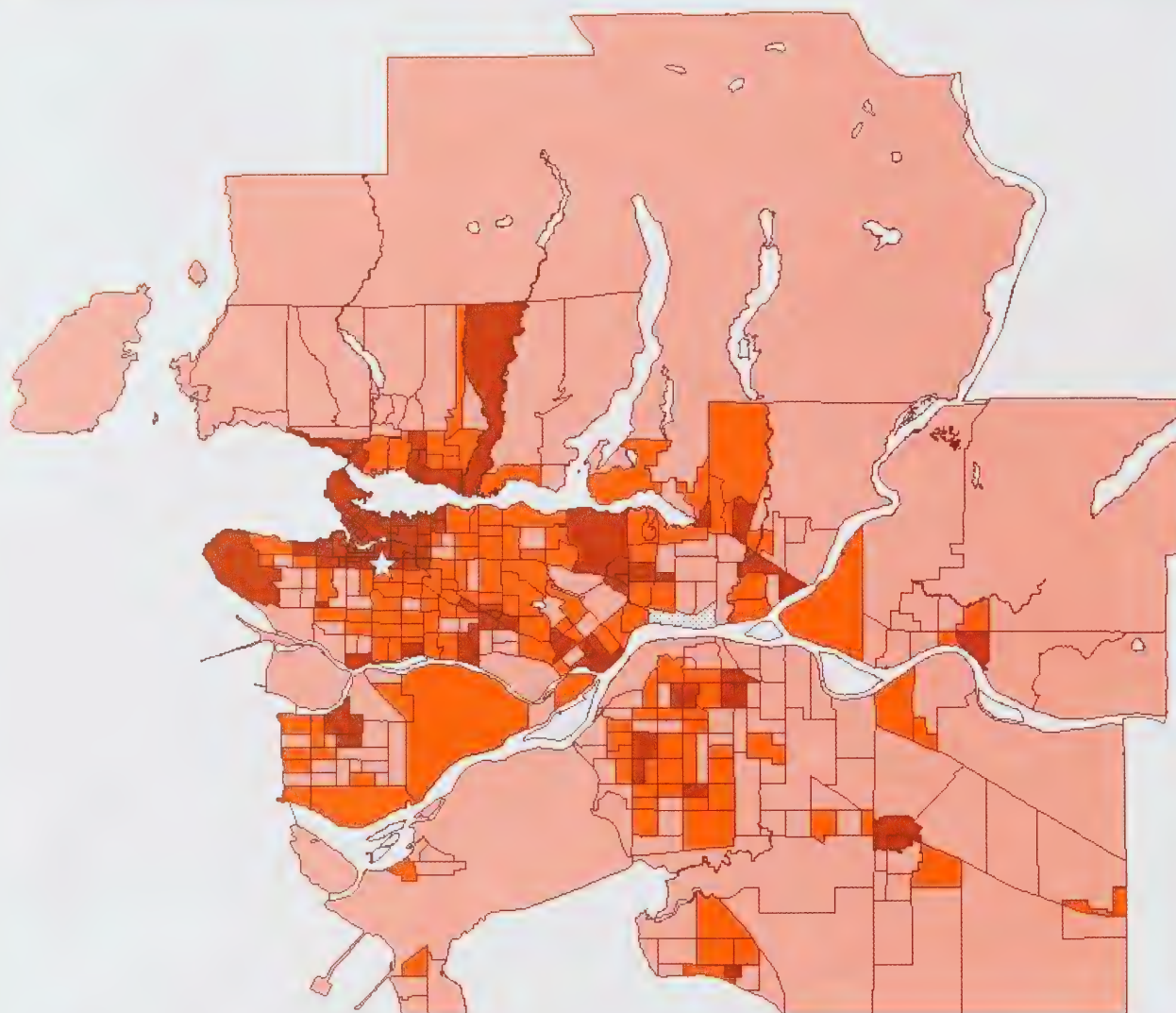
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



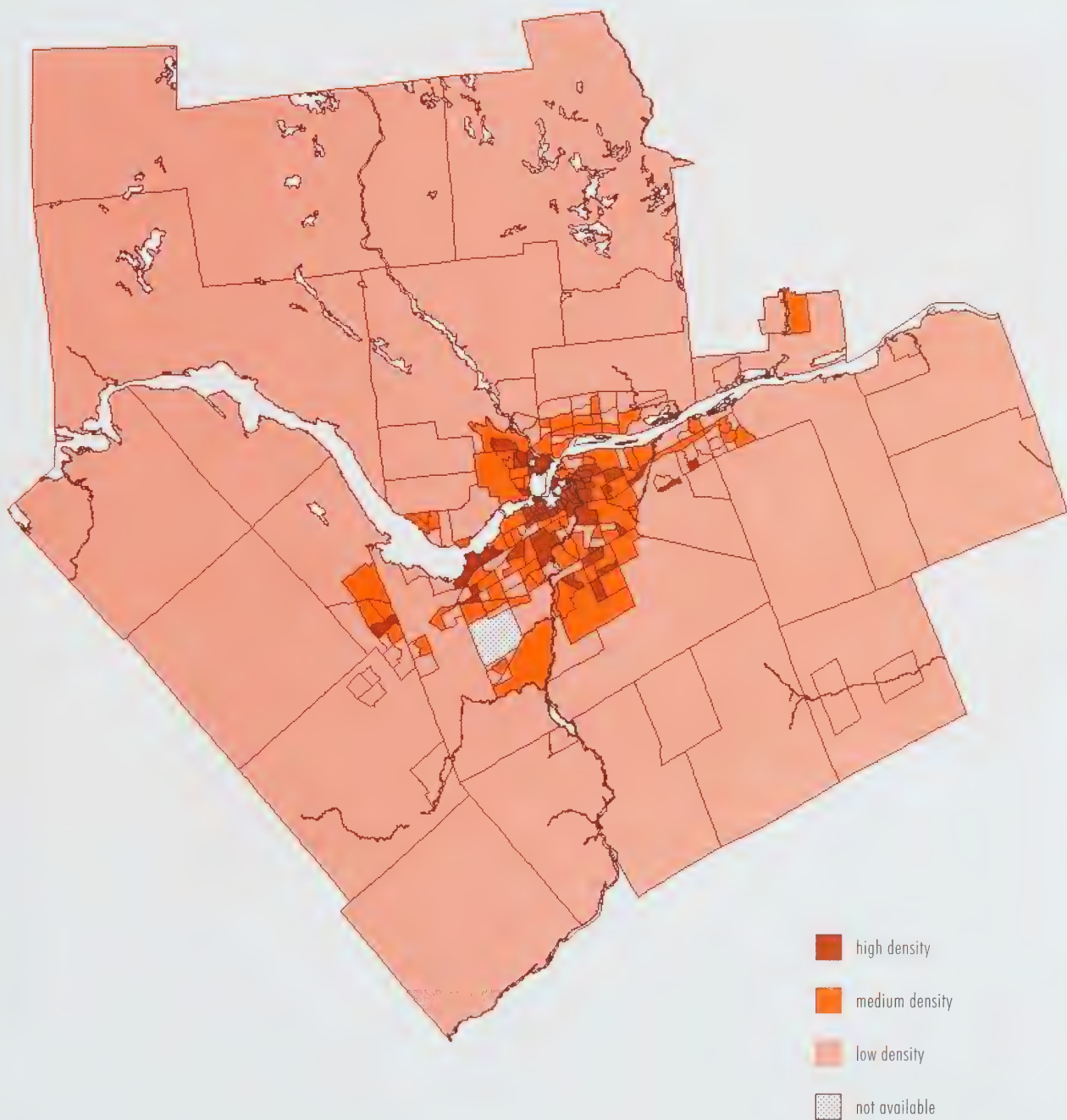
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



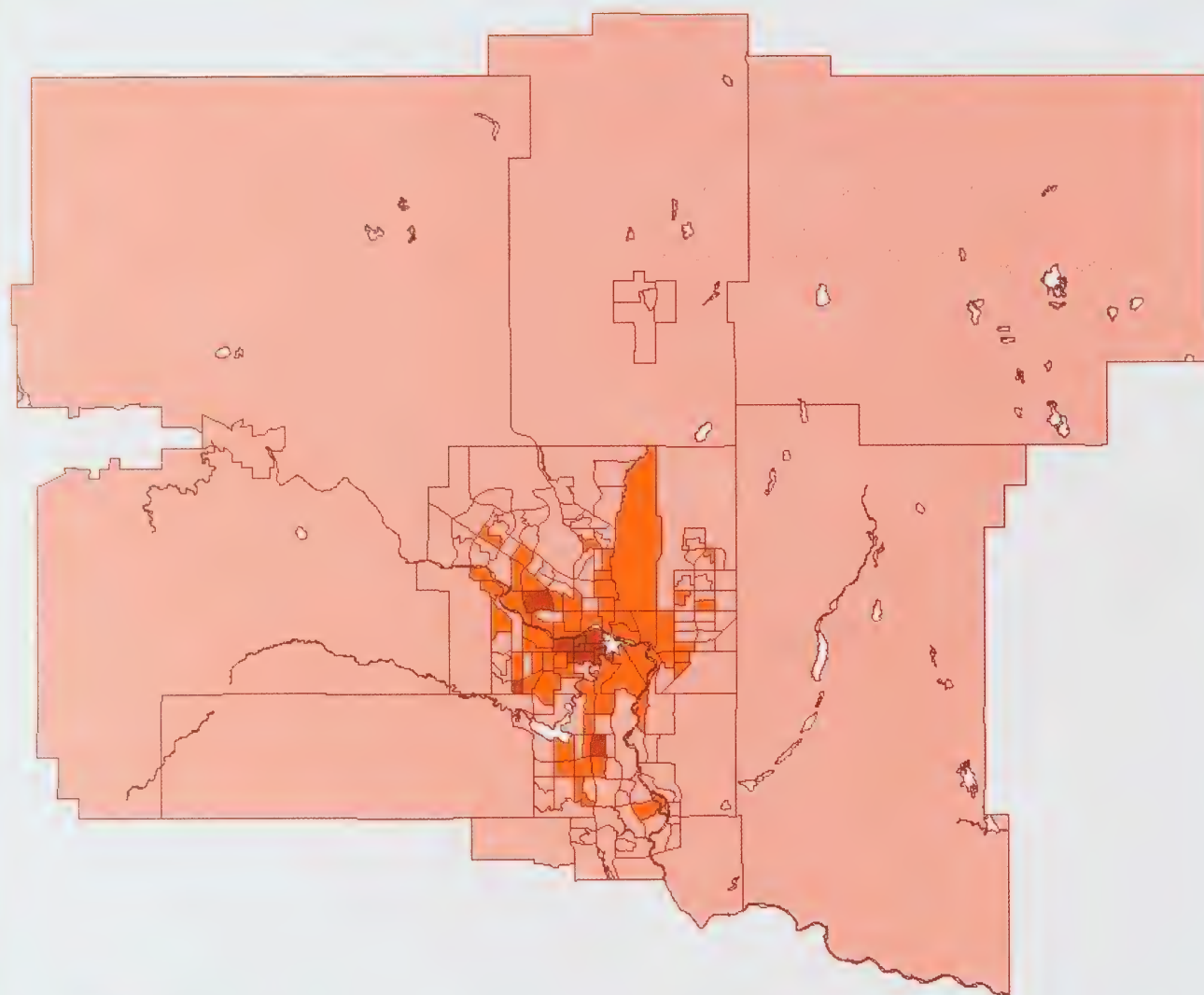
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



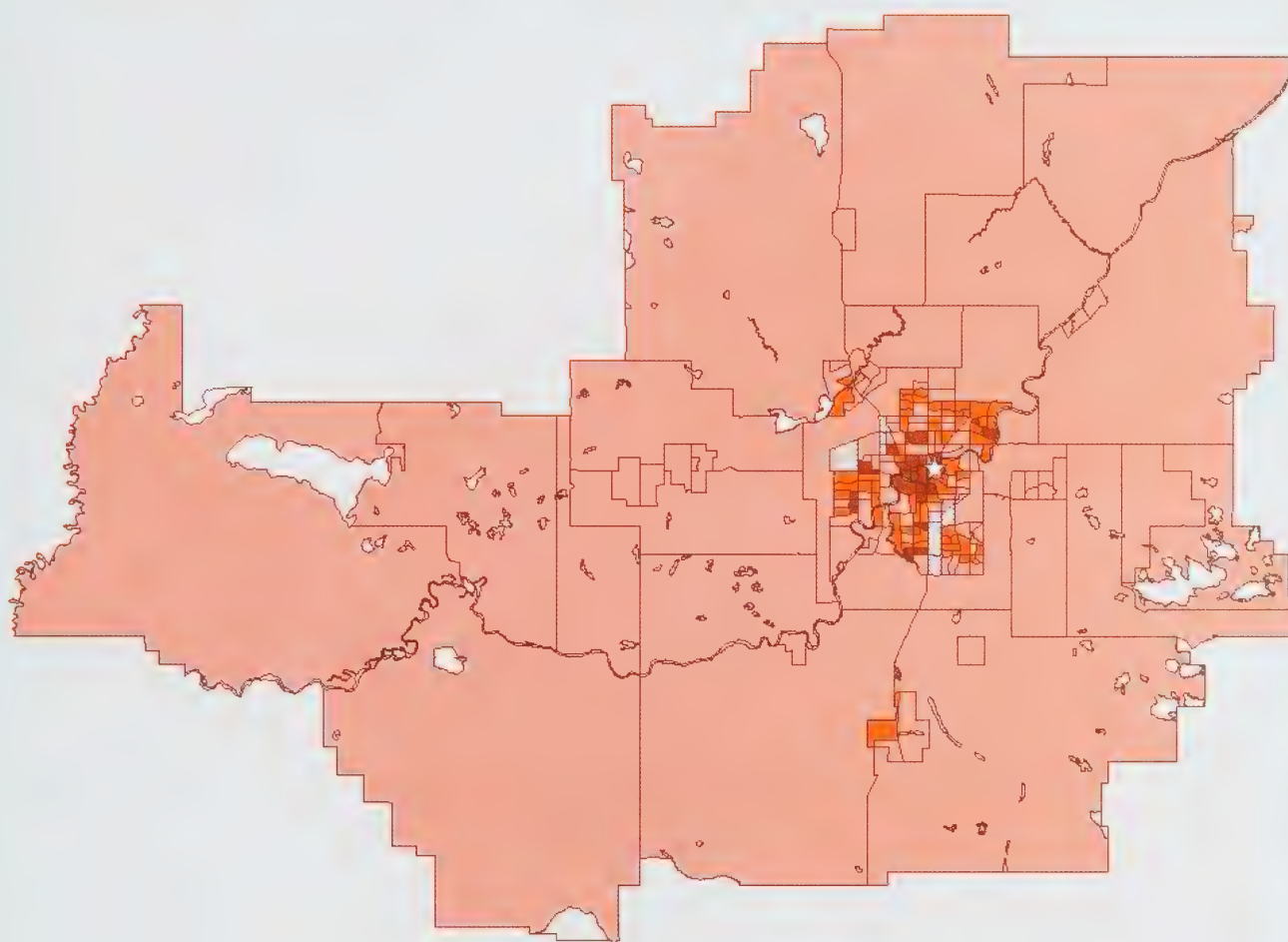
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



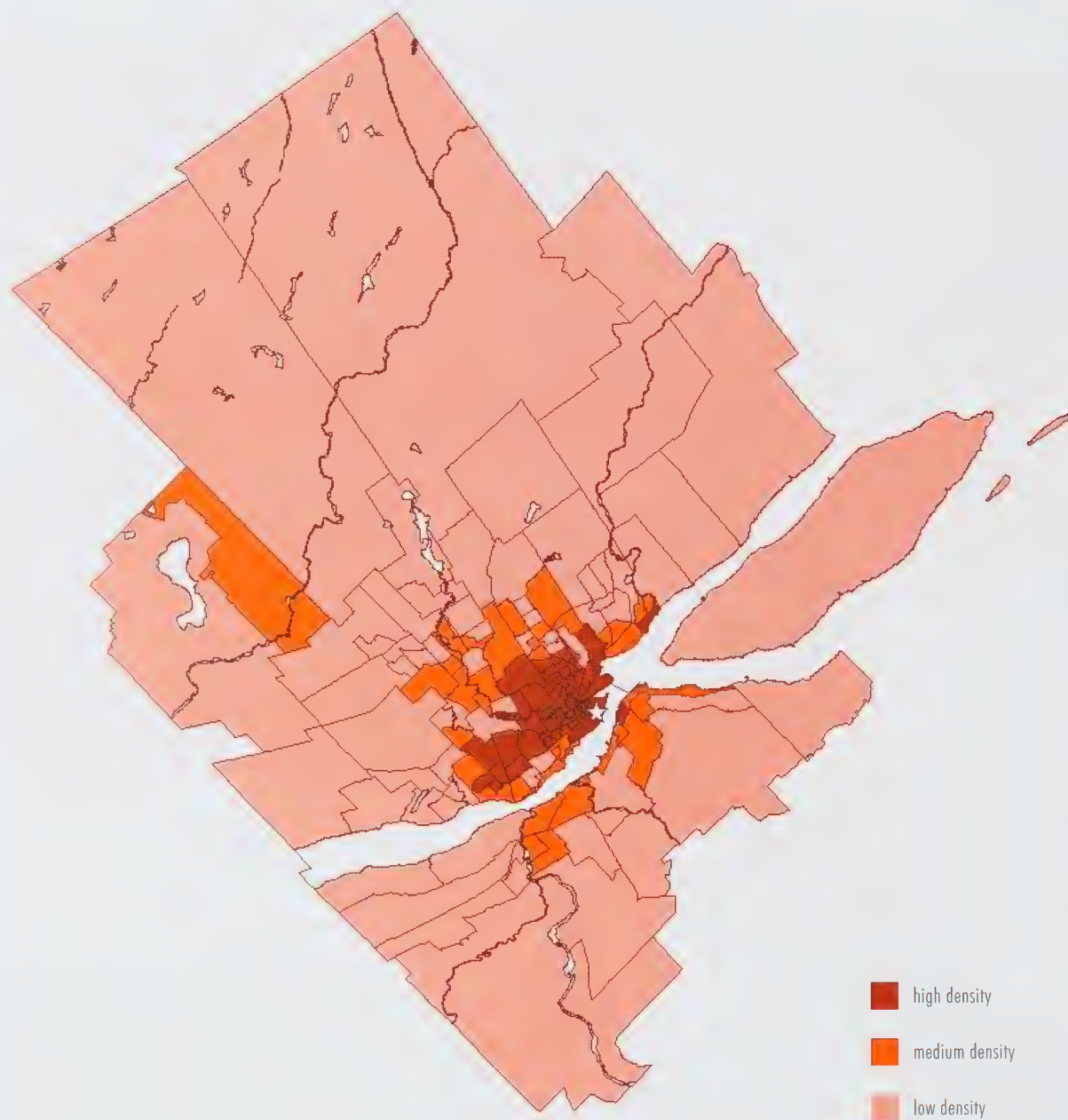
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



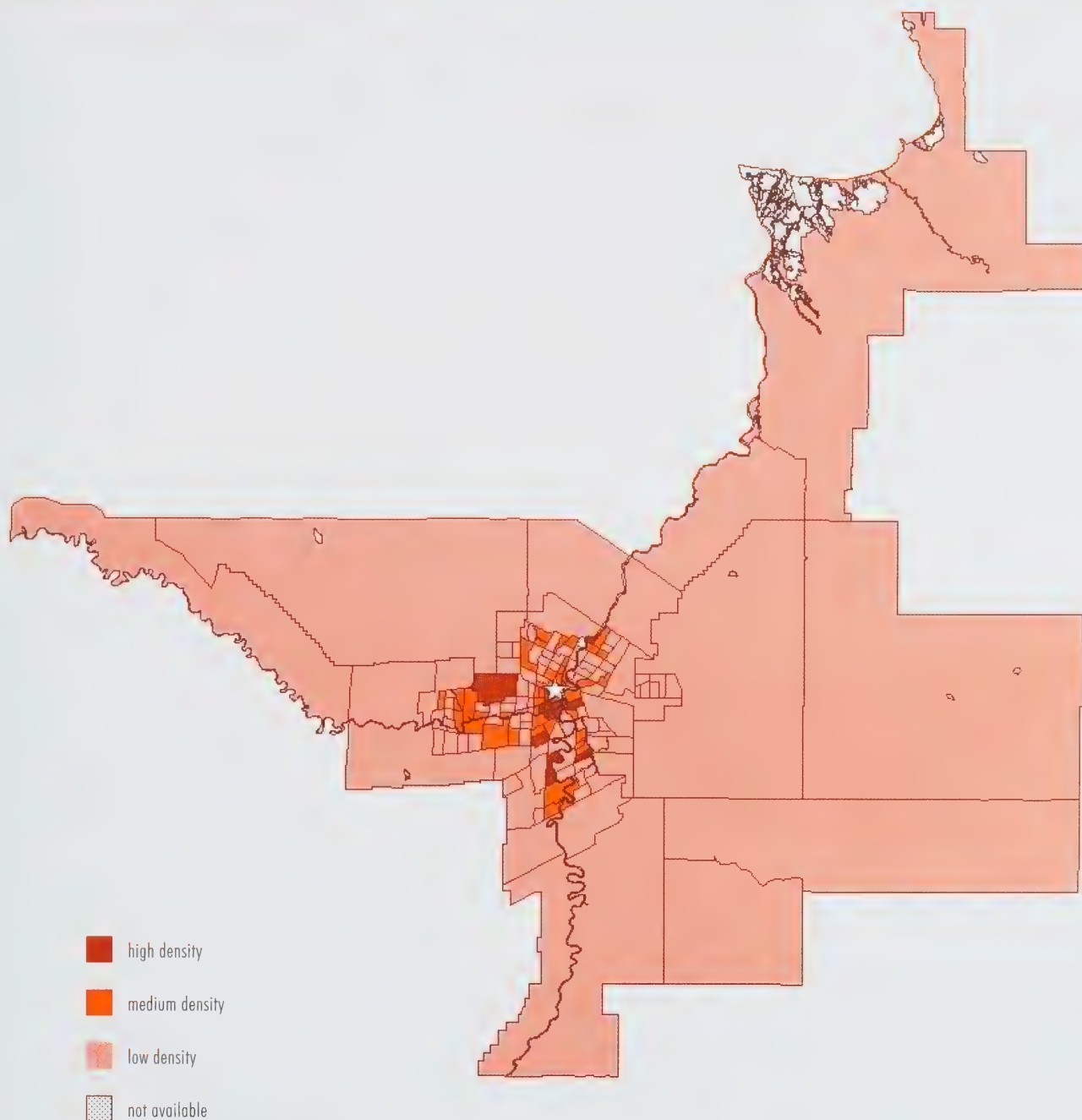
Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.



Source: Statistics Canada, 2001 Census.

Star: locates the census tract that includes the city hall of the central municipality.

Life in metropolitan areas

Dependence on cars in urban neighbourhoods

by Martin Turcotte

To get around easily in today's big cities, especially in their sparsely populated suburbs, access to a private motor vehicle is not only very convenient but sometimes absolutely essential. Parents with young children know this only too well, since they often have to commute to work and back, drive the children to the daycare centre or evening activities, go to an appointment, shop for dinner and do other things besides – all in the same day.

While many Canadians simply could not do without their cars, the automobile is associated with numerous problems, as we are all aware. In Canada and other Western countries, road transportation is a big contributor to greenhouse gas (GHG) emissions.¹ A significant proportion of the increase in GHG emissions in recent years can be attributed to the growing popularity of pickup trucks and sport utility vehicles.²

Besides adding to GHG emissions, driving our cars every day is responsible for much of the pollution that generates smog.³ In addition, the widespread use of automobiles by

workers commuting to work instead of using public transit is a major factor in the traffic congestion that affects most metropolitan areas in North America⁴ and leads to high costs for building and repairing roads.

In these circumstances, it is hardly surprising that many people are calling for an end to the excessive use of cars and for greater reliance on more environment-friendly means of transportation, such as car-pooling, public transit, walking and bicycling.

As much as they want to do something, many people probably feel helpless when confronted with such suggestions. One of the underlying reasons for these feelings may lie in the fact that the types of neighbourhoods and municipalities in which people live simply do not lend themselves to modes of travel other than the automobile – in part because businesses, places of work and residences are located in different areas.

In this article, we focus on the relationship between the types of neighbourhoods in which people live

and the use of cars for daily travel. How much do residents of peripheral areas and low-density neighbourhoods depend on cars in their daily lives compared with residents of more "urban" neighbourhoods? To what extent can residents of central neighbourhoods go about their day-to-day business without using a car? In which metropolitan areas is exclusive use of the automobile most common?

At the same time, we are interested in identifying the characteristics of people who use cars. For example, are people who live alone less inclined to drive and more likely to walk than couples with children?

To answer these questions, we will use data from the 2005 General Social Survey (GSS) on time use to examine motor vehicle use by Canadians aged 18 and over who made at least one trip commuting and/or running errands on the survey reference day. Data from the 2001 Census were also used to differentiate the more central neighbourhoods of census metropolitan areas (CMAs) from the more peripheral ones, and low-density

This article is based on data collected by the 2005 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. For the fourth time in Canada, the GSS has collected national level time use data. In addition to the time use diary, the 2005 questionnaire covers perceptions of the time crunch, social networks, transportation, and cultural and sports activities.

The time use estimates in this report are based on data from the time use diary portion of the (GSS). The diary provides a detailed record of the time spent on all activities in which respondents participated on the designated day. In addition, information was collected on where the activities took place (e.g., in a car as the driver, on public transit) and who the respondent was with (e.g., spouse, children, family, friends).

This study includes all trips made by people aged 18 and over on the reference day. Since age restrictions on automobile use may vary from province to province, people aged 15 to 17 were excluded from the study population.

Only people who made at least one trip regardless of mode of transportation on reference day were selected for the study. A few respondents reported total travel time of more than 720 minutes (12 hours); because these extreme cases could have had an excessive impact on the estimates, they were also excluded from the analysis.

In 2005, 85% of Canadians aged 18 and over made at least one trip on their designated day. The proportion was roughly the same in low-density neighbourhoods as in high-density neighbourhoods and as high in central neighbourhoods as in peripheral neighbourhoods. Therefore, the differences in automobile dependence between types of neighbourhoods cannot be attributed to the fact that residents of certain types of neighbourhoods were more or less likely to have made at least one trip during their day.

According to 2005 GSS data, the factor that was most strongly associated with the probability of having made a trip on that day was age: 72% of people aged 65 to 74 and 61% of people aged 75 and over made at least one trip, compared with 91% of people aged 18 to 24.

Delimiting the city centre, the periphery and low- and high-density neighbourhoods

In this study, the city centre is the census tract that contains the city hall of the central municipality; hence, the

distance from the city centre is the distance between the neighbourhood of residence and the central municipality's city hall. Central neighbourhoods are neighbourhoods that are less than 5 kilometres from census tract (CT) containing the city centre. Other neighbourhoods are referred to as peripheral neighbourhoods, and are differentiated by their distance from the city centre; for example, neighbourhoods that are between 5 and 9 kilometres from the city centre are regarded as part of the near periphery.

The density level of neighbourhoods is based on the type of dwellings they contain. We established three main categories of neighbourhoods:

Low-density neighbourhoods, which contain single, semi-detached and mobile homes and dwellings. Such dwellings are considered to be traditional suburban dwellings. Specifically, low-density neighbourhoods are neighbourhoods in which at least 66.6% of the dwellings are traditional suburban dwellings.

High-density neighbourhoods, which are essentially composed of apartment and condominium buildings (whether high-rise or low-rise) and row houses. Such dwellings are characteristic of traditional urban neighbourhoods. High-density neighbourhoods are neighbourhoods in which less than 33.3% of the dwellings are traditional suburban dwellings.

Medium-density neighbourhoods are characterized by mid-level concentrations of 33.3% to 66.6% traditional suburban dwellings.

For more details on how these criteria were defined, see "The city/suburb contrast: How can we measure it?" in *Canadian Social Trends*, 85.

Definitions

CMA: Census Metropolitan Area. A CMA is an area consisting of one or more adjacent municipalities situated around a major urban core. A CMA must have a population of at least 100,000, and the urban core must have a population of at least 50,000.

Eight largest CMAs: This category includes Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Quebec and Winnipeg.

Medium CMAs: This category includes Hamilton, London, Kitchener, St. Catharines - Niagara, Halifax, Victoria, Windsor and Oshawa.

Smaller CMAs: This category includes Saskatoon, Regina, St. John's, Greater Sudbury, Chicoutimi - Jonquière, Sherbrooke, Abbotsford, Kingston, Trois-Rivières, Saint John and Thunder Bay.

Predicted probability model

To calculate the predicted probabilities, we kept constant a number of characteristics to simulate a "typical" reference person. In the context of this analysis, this reference person is a man aged 35 to 44 years old, born in Canada, who has a job and holds a college diploma, has a household income of \$60,000 to \$99,999 but has no children living in the household, and he lives in the CMA of Toronto. We then ask the following question: if a person having all these

characteristics moved from a high-density neighbourhood to a low- or medium-density neighbourhood, how would it change the probability that he would use a car to make all his daily trips?

Please note

The differences between the central municipalities and other constituent municipalities of CMAs are presented for information purposes only. The 2005 General Social Survey used the CMA and municipality boundaries for 2001. Consequently, any boundary changes made between 2001 and 2005 (especially in Quebec) are not reflected in the municipal data.

from high-density neighbourhoods (for more information, see "What you should know about this study").

Going by car is even more common now

Even though there is a growing tendency for the population to congregate in large urban centres and people have access to better public transportation services, dependence on the automobile increased between 1992 and 2005. According to data from the General Social Survey (GSS) on time use, the proportion of people aged 18 and over who went everywhere by car – as either a driver or a passenger – rose from 68% in 1992, to 70% in 1998 and then 74% in 2005.

Conversely, the proportion of Canadians who made at least one trip under their own power by bicycle or on foot appears to have declined between 1998 and 2005. In 2005, 19% of people 18 and over walked or pedalled from one place to another, down from 26% and 25% in 1992 and 1998 respectively. How can we explain why Canadians, most of whom live in large metropolitan regions, now need their cars more than ever to go about their daily business?

Distance from the city centre results in greater use of cars

Part of the explanation lies in the fact that many residents of metropolitan regions live a significant distance from the city centre. There are very clear links between living in a peripheral neighbourhood and depending on the automobile as the primary mode of transportation for day-to-day travel. The farther people live from the city centre, the more time they spend behind the wheel (Table 1).

For Canadians aged 18 and over who made at least one trip on the survey reference day, those who lived 25 kilometres from the centre of a census metropolitan area (CMA) spent an average of one hour and 23 minutes per day in the car. In comparison, those who lived within 5 kilometres of the centre of their CMA spent an average of just 55 minutes travelling by car, whether as the driver or a passenger.

In view of these differences, it is not surprising to find that the greater the distance from the centre, the higher the proportion of people who used a car for at least one of their trips. Specifically, 61% of people living in a central neighbourhood got behind the wheel, compared with 73% of people living between 10 and

14 kilometres from the city centre and 81% of people living 25 kilometres or more from the centre.

In census agglomerations (CAs are smaller urban areas) and in rural areas and small towns, people behaved in much the same way as residents of neighbourhoods farthest from the CMA city centre. However, average travel times as a driver were lower for residents of small towns and rural areas that were farthest from the CA city centre.⁵

Neighbourhood density is important

Even more revealing relationships emerge if we ignore distance and instead categorize people according to the density of the neighbourhood in which they live. For example, over 80% of residents comprising exclusively or almost exclusively suburban-type housing of very neighbourhoods made at least one trip by car (as the driver) during the day. By comparison, less than half of people living in very high-density neighbourhoods did so.

In addition, travelling exclusively by driving was far more common in low-density neighbourhoods. Only about one-third of residents in very high-density neighbourhoods were at

Table 1 The more suburban the neighbourhood, the more time people spent in a car on the reference day

	Population aged 18 and over making at least one trip by car			
	As a driver		As a driver or passenger	
	%	Average duration in minutes	%	Average duration in minutes
Total (Canada)	74	56	87	68
Census metropolitan areas (CMAs) †	71	55	85	68
Census agglomeration	78*	53	91*	64
Rural areas in a strong metropolitan influence zone (MIZ)	82*	66*	93*	80*
Rural areas in a moderate, weak or non-existent MIZ	77*	58	92*	74*
Distance from city centre (CMA only)				
Less than 5 km †	61	43	76	55
5 to 9 km	68*	50*	82*	62*
10 to 14 km	73*	56*	86*	69*
15 to 19 km	75*	60*	90*	74*
20 to 24 km	78*	60*	92*	71*
25 km or more	81*	70*	93*	83*
Percentage of suburban-type housing¹ in neighbourhood (CMA only)				
Less than 5 †	44	30	60	41
5 to 9	49*	34	68*	49
10 to 19	53*	39*	70*	52*
20 to 29	62*	43*	81*	57*
30 to 39	63*	52*	78*	65*
40 to 49	69*	52*	85*	64*
50 to 59	71*	50*	83*	60*
60 to 69	76*	59*	89*	71*
70 to 79	77*	57*	91*	71*
80 to 89	80*	60*	92*	73*
90 to 94	82*	68*	94*	81*
95 to 100	84*	74*	94*	87*

1. Single, semi-detached and mobile homes.

† Reference category.

* Statistically significant difference from reference category at $p < 0.05$.

Note: Metropolitan area boundaries used in the 2005 General Social Survey are those established in the 2001 Census. Also see "What you should know about this study" for more information.

Source: Statistics Canada, General Social Survey, 2005.

the wheel for all of their trips during the day, compared with almost two-thirds of those who lived in very low-density neighbourhoods (Chart 1).

Difference between large and smaller CMAs

Together, Canada's eight largest metropolitan areas – the CMAs of Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Québec City and Winnipeg – account

for nearly half of the country's population (49% according to the 2006 Census). They differ from many other CMAs in the size of their population, their geographic size and their very rapid growth.

Not surprisingly, there are significant differences between these large CMAs and their smaller counterparts with regard to dependence on automobiles. For example, 81% of the residents of smaller CMAs with

a population under 250,000 in 2001 went everywhere by car – as either the driver or a passenger – on the reference day, compared with 69% of residents in the eight largest CMAs.

These differences between larger and smaller CMAs can be attributed to a number of factors. In CMAs such as Toronto, Montréal and Vancouver, especially in their more central neighbourhoods, public transit provides better service and is therefore used more often; parking is not as readily available for downtown workers, which discourages them from driving; and higher density makes it easier for people to walk or bicycle than to drive (higher density favours public transit, but it also tends to increase traffic congestion).⁶

Conversely, in smaller CMAs, even neighbourhoods close to the centre have characteristics that make them similar in some ways to traditional postwar suburban neighbourhoods. In 2001, for example, 45% of the dwellings in the central neighbourhoods of smaller CMAs were single-detached houses, whereas the proportions of that dwelling type were much lower in the central neighbourhoods of Toronto (13%), Montréal (4%) and Vancouver (21%). Because of the high cost and scarcity of land in the centre of most big cities, very few single-detached houses are built there.

Making all trips by car is less common in Montréal's central neighbourhoods

In 2005, of the people living in the eight largest CMAs, Calgary and Edmonton residents were the most likely to have made all their trips on the reference day exclusively by car as either the driver or a passenger (75% and 77%, respectively). In contrast, Montréal residents were least likely to have done so (65%). The difference may be due to the fact that more people live in low-density neighbourhoods in the two Alberta CMAs than in Montréal and other large urban areas. As we have seen, there is a correlation

Chart 1 About two-thirds of people living in the most suburban neighbourhoods drove their cars to make all their trips on the reference day

% of population aged 18 and over making all trips as drivers



1. Single, semi-detached and mobile homes.

* Statistically significant difference from 0 to 4% at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

between lower population density and greater reliance on cars.⁷ The fact that Montréal is an older city that was well-established before the automobile became as ubiquitous as it is today may shed some light on this difference (Table 2).

Differences in automobile use also exist between the central neighbourhoods of the eight largest CMAs. Specifically, the proportion of central neighbourhood residents who travelled everywhere by car was 29% in Montréal, compared with 43% in Toronto, 56% in Vancouver and 66% in Calgary. In the smaller CMAs, 75% of the residents of central neighbourhoods travelled exclusively by car.

Despite these regional differences, the overall patterns are very similar in CMAs of all sizes: the greater the distance from the city centre, and the greater the prevalence of traditional suburban dwellings, the higher the proportion of people who made

Table 2 Dependence on automobiles differs considerably between CMAs, but one of the most important reasons is housing density

% of population aged 18 and over making all trips by car (as a driver or passenger) on the reference day, by census metropolitan area (CMA)

	Toronto	Montréal	Vancouver	Ottawa—Gatineau	Calgary	Edmonton	Quebec	Winnipeg	Medium CMAs	Smaller CMAs
Total	66	65	69	71	75	77	74	72	75	81
Housing density										
High †	52	50	51	51	46 ^E	58	53	60	58	66
Medium	63*	69*	74*	68*	76*	77*	78*	63	70*	77*
Low	73*	80*	77*	83*	77*	80*	82*	77*	80*	87*
Distance from city centre										
Less than 5 km †	43	29	56	48	66	64	51	65	67	75
5 to 9 km	51	54*	57	69*	72	78*	75*	73	78*	83*
10 to 15 km	61*	66*	64	76*	79	80*	76*	78*	81*	91*
15 km or more	74*	78*	83*	82*	79	82*	89*	91*	81*	92*
Administrative boundaries										
Suburban municipalities	76*	73*	75*	78*	89*	82*	78*	91*	..	..
Central municipality †	55	43	55	68	73	74	57	71	..	..

.. not available for a specific reference period

^E use with caution

† Reference category.

* Statistically significant difference from reference category at $p < 0.05$.

Notes: Metropolitan area boundaries used in the 2005 General Social Survey are those established in the 2001 Census. See "What you should know about this study" for a list of the CMAs comprising the medium and smaller CMA categories.

Source: Statistics Canada, General Social Survey, 2005.

their trips by car as the driver or a passenger.

Characteristics of the neighbourhood, or of the people who live in it?

The correlations described above between place of residence and reliance on cars for day-to-day travel appear to be very robust. There is a possibility, however, that a portion of these differences is due to the fact that characteristics differ considerably between people who live in higher- versus lower-density neighbourhoods, or neighbourhoods that are closer to or farther from the city centre.⁸

Many characteristics, aside from place of residence, are associated with lesser or greater automobile use (Table A.1). In order to confirm the robustness of the association between the use of a car and a place of residence, we performed a statistical analysis taking account of a number of variables at the same time (in other words, the effect of age, sex, income and so on were held constant). Since we are primarily interested in the correlations between neighbourhood characteristics and automobile use for daily travel, only residents of CMAs were considered.

The results show a clear correlation between the density of the neighbourhood of residence and the probability that at least one trip during the day was made by car. For example, controlling for other factors associated with automobile use, the odds that a person drove on at least one of their trips during the day was 2.5 times higher for residents of low-density neighbourhoods than for residents of high-density neighbourhoods (Table 3, Model 1).

The conclusion was the same when we examined the other two cases: making *all* of the day's trips as a driver, and making *all* of the day's trips by car as either the driver or a passenger. That is, when we kept all other factors constant, the odds that a resident of a low-density neighbourhood made all of their trips

by car was 2.8 times higher than the odds for a resident of a high-density neighbourhood.

When the influence of factors such as income, age, and so on, is removed, the distance between neighbourhood of residence and the centre of the CMA is also associated with an increase in automobile dependence. For example, if we keep all those other factors constant, the odds that someone drove their car on all trips during the day was 3.0 times higher for people who lived 25 kilometres or more from the city centre than for people who lived less than 5 kilometres from the centre (Table 3, Model 2).

Density, distance or both?

In many cases, high-density neighbourhoods are also central neighbourhoods, and peripheral neighbourhoods are usually low-density neighbourhoods.⁹ So far, our analysis has not shown whether, at an equal distance from the city centre, a higher-density neighbourhood

will exhibit less dependence on cars, and vice versa for lower-density neighbourhoods. This is an important question, since land is scarce and expensive in central neighbourhoods and since most new construction takes place in peripheral neighbourhoods.

The answer is provided by a supplementary analysis (Chart 2). Keeping constant all factors associated with automobile use, we find that in central and near-peripheral neighbourhoods 5 to 9 kilometres from the city centre, living in a lower-density neighbourhood is associated with a higher predicted probability of using a car for all trips.

Above 10 kilometres from the city centre, however, the impact of neighbourhood density on automobile use dwindles until it almost vanishes.¹⁰ If the effects of other factors are kept constant, the predicted probability that a person living in a *medium-* or *high-*density neighbourhood made all trips by car was not statistically different from

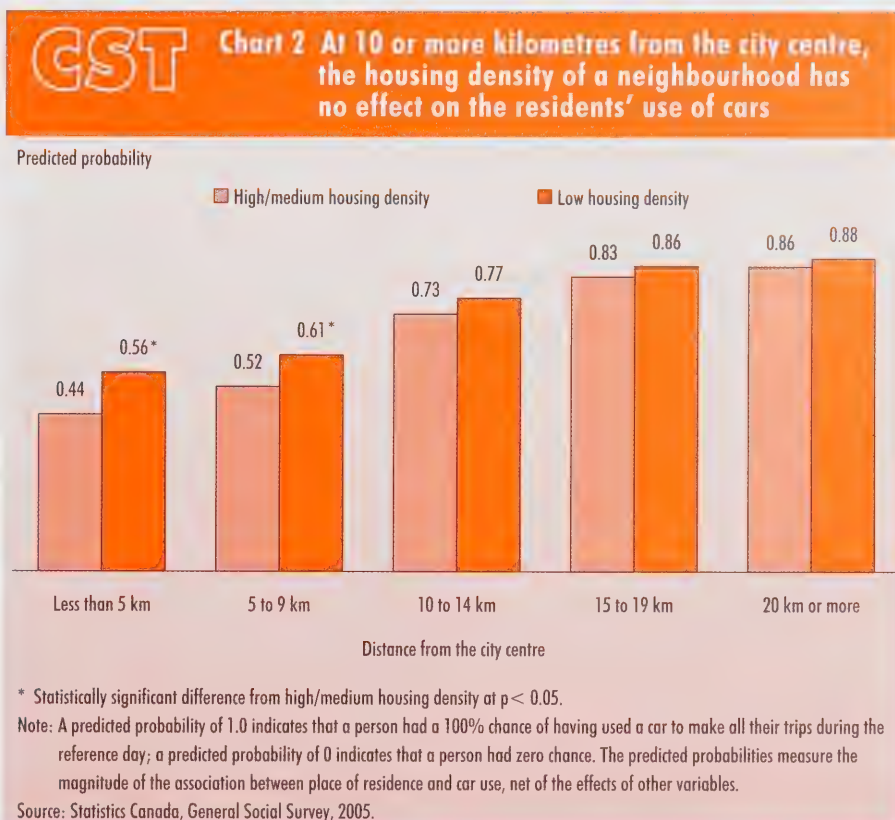


Table 3 Neighbourhood housing density is strongly associated with car dependence, even when other factors like income, age and presence of children are accounted for

	Model 1			Model 2		
	Number of trips as driver		All trips as driver or passenger	Number of trips as driver		All trips as driver or passenger
	At least one	All trips		At least one	All trips	
Odds ratios						
Housing density						
High †	1.0	1.0	1.0	...	...	...
Medium	1.7*	1.8*	1.9*	...	...	...
Low	2.5*	2.2*	2.8*	...	...	...
Distance from city centre (CMA only)						
Less than 5 km †	...	...	...	1.0	1.0	1.0
5 to 9 km	...	...	...	1.5*	1.3*	1.6*
10 to 14 km	...	...	...	2.1*	1.8*	2.1*
15 to 19 km	...	...	...	2.6*	2.1*	3.2*
20 to 24 km	...	...	...	3.5*	2.5*	3.4*
25 km or more	...	...	...	3.9*	3.0*	4.4*
Sex						
Female †	1.0	1.0	1.0	1.0	1.0	1.0
Male	2.0*	2.2*	1.3*	2.1*	2.2*	1.3*
Age						
18 to 24 years †	1.0	1.0	1.0	1.0	1.0	1.0
25 to 34 years	1.8*	1.9*	1.8*	1.8*	1.8*	1.8*
35 to 44 years	2.1*	2.3*	2.2*	2.2*	2.3*	2.2*
45 to 54 years	2.6*	2.5*	2.6*	2.6*	2.5*	2.6*
55 to 64 years	2.6*	2.4*	2.5*	2.6*	2.3*	2.5*
65 to 74 years	2.6*	2.7*	3.2*	2.5*	2.6*	3.1*
75 years or more	1.5*	1.6*	1.5*	1.4*	1.6*	1.4
Immigration status						
Born in Canada †	1.0	1.0	1.0	1.0	1.0	1.0
Immigrant (before 1990)	0.9	1.1	1.0	0.9	1.1	1.1
Recent immigrants (1990 to 2005)	0.5*	0.8*	0.9	0.5*	0.7*	0.8
Presence of activity limitations						
Yes/sometimes	0.8*	0.9	0.9	0.8*	0.8*	0.9
Yes/often	0.8*	0.8*	0.8*	0.8*	0.8*	0.8*
No †	1.0	1.0	1.0	1.0	1.0	1.0
Highest level of educational attainment						
No secondary diploma †	1.0	1.0	1.0	1.0	1.0	1.0
Secondary completion	1.5*	1.3*	1.3*	1.5*	1.3*	1.3*
College or trade diploma	1.6*	1.2*	1.2	1.6*	1.2	1.1
University degree	1.5*	1.1	0.9	1.6*	1.1	1.0
Household income						
Less than \$20,000 †	1.0	1.0	1.0	1.0	1.0	1.0
\$20, 000 to \$39,999	1.5*	1.4*	1.7*	1.5*	1.4*	1.7*
\$40,000 to \$59,999	2.0*	1.6*	2.0*	2.1*	1.7*	2.1*
\$60,000 to \$99,999	2.7*	1.6*	2.2*	2.9*	1.7*	2.4*
\$100,000 and more	2.6*	1.6*	2.0*	2.7*	1.7*	2.2*
Main activity for the last 7 days						
Employed/looking for work †	1.0	1.0	1.0	1.0	1.0	1.0
Caring for children/keeping house	0.7*	0.6*	0.9	0.7*	0.6*	0.9
Retired	0.8	0.8	0.9	0.8	0.8	0.9
Student	0.6*	0.5*	0.5*	0.6*	0.5*	0.5*
Other activity	1.0	1.0*	1.0*	1.0	1.0*	1.0*

Table 3 Neighbourhood housing density is strongly associated with car dependence, even when other factors like income, age and presence of children are accounted for
— continued

	Model 1			Model 2		
	Number of trips as driver		All trips as driver or passenger	Number of trips as driver		All trips as driver or passenger
	At least one	All trips		At least one	All trips	
Odds ratios						
Presence of a child under 5						
No †	1.0	1.0	1.0	1.0	1.0	1.0
Yes	1.0	1.0	1.0	1.0	1.0	0.9
Presence of a child aged 5 to 12						
No †	1.0	1.0	1.0	1.0	1.0	1.0
Yes	1.6*	1.1	1.0	1.6*	1.1	1.0
CMA of residence (Census Metropolitan Area) ¹						
CMA of Toronto	0.5*	0.6*	0.5*	0.3*	0.4*	0.2*
CMA of Montréal	0.6*	0.7*	0.6*	0.3*	0.4*	0.2*
CMA of Vancouver	0.7*	0.7*	0.6*	0.4*	0.5*	0.3*
CMA of Ottawa-Gatineau	0.6*	0.7*	0.6*	0.4*	0.5*	0.4*
CMA of Calgary	0.8	0.8	0.6*	0.7*	0.7*	0.5*
CMA of Edmonton	0.7*	0.9	0.7	0.6*	0.7*	0.6
CMA of Quebec	0.9	0.7*	0.7	0.6*	0.6*	0.5
CMA of Winnipeg	0.6*	0.7*	0.5*	0.6*	0.7*	0.5*
Medium CMAs	0.7*	0.8*	0.7*	0.7*	0.8*	0.6*
Smaller CMAs †	1.0	1.0	1.0	1.0	1.0	1.0
Day of the week						
Weekday †	1.0	1.0	1.0	1.0	1.0	1.0
Weekend	1.0	1.0	1.7*	1.0	1.0	1.7*
Worked on the reference day						
No †	1.0	1.0	1.0	1.0	1.0	1.0
Yes	1.4*	1.4*	1.0	1.4*	1.4*	1.0

... not applicable

1. Metropolitan area boundaries used in the 2005 General Social Survey are those established in the 2001 Census. See "What you should know about this study" for a list of the CMAs comprising the medium and smaller CMA categories.

† Reference group.

* Statistically significant difference from the reference group at $p < 0.05$.

Note: This table presents the odds that a respondent used a car on the reference day, relative to the odds that the reference group did the same thing, when the effect of all other factors shown in the table are controlled for. An odds ratio close to 1.0 for the comparison group means that there is little or no difference between the comparison and the reference groups.

Source: Statistics Canada, General Social Survey, 2005.

that of a person living in a *low*-density neighbourhood. In other words, beyond 10 kilometres from the city centre, the fact that a neighbourhood was mainly composed of single family or semi-detached houses rather than apartments was not correlated with greater or less automobile use.

This situation may be due to a number of factors, including the fact that neighbourhoods in peripheral areas, whether they are low-density or not, are usually zoned for only one

purpose (residential, commercial or industrial) rather than multiple uses simultaneously.¹¹ Because of that, and because the activities in which most people take part during a day are often farther apart, it is difficult to use any means of transportation other than a car.¹² This is especially true since many locations in suburban neighbourhoods, such as shopping centres, movie theatres, office buildings and other places of work, are difficult or impossible to get to on foot or by public transit.

In contrast, the central neighbourhoods of large cities are generally characterized by a greater mix of residential, commercial and industrial uses and by greater density, two conditions that favour adequate public transportation and travel on foot.¹³

Suburban men take their cars

Statistical analysis shows that a number of personal characteristics, other than the type and location of

the neighbourhood in which one lives, are also strongly correlated with automobile use during a given day.

Age and sex are among the factors that have a substantial impact on the probability of driving. On the reference day in 2005, 81% of Canadian men aged 18 and over made at least one trip behind the wheel of a car. The corresponding figure for women was just 66% (Table A.1). This difference, which remains statistically significant when all additional factors are kept constant, is probably attributable to the fact that women are more likely to take public transit and that they are often passengers when they travel by car. In 2005, 31% of women made at least one trip by car as a passenger, compared with only 11% of men.

Baby boomers between ages 45 and 54 were particularly likely to have driven their cars during the day, a finding that remained statistically significant even when all other factors were controlled for. For example, when the density of the neighbourhood of residence and the other factors in the statistical model were kept constant, the odds that people aged 45 to 54 drove a car on all the trips they made in a given day was 2.5 times higher than the odds for 18- to 24-year-olds (Table 3).

Similarly, people with children aged 5 to 12 also had odds 1.6 times higher than people without children that age to have driven on at least one trip. These parents were also more likely to have made trips during the day, regardless of the mode of transportation. Also among the other characteristics associated with a greater probability of driving during the day were being employed and living in a small CMA.

Summary

This article suggests that the physical and geographic characteristics of urban neighbourhoods are pivotal factors in Canadians' dependence on cars for their routine trips to work, to run errands and so on. It found that neighbourhoods composed primarily

of typically suburban dwellings and located far from the city centre were characterized by an appreciably higher level of automobile dependence. This confirms a number of facts that are already known about low-density peripheral neighbourhoods.¹⁴

These results also reveal some new factors, elements that are not considered as often. For instance, the study shows that beyond a certain distance from the city centre, the housing density of a neighbourhood is not likely to have much impact on automobile use.

These findings are important in view of what we know about new neighbourhoods. A large proportion of the housing stock built since 1991 is found far from the city centre in low-density neighbourhoods. As we have seen, these are the neighbourhoods with the highest level of automobile dependence.


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1. Environment Canada (2006). *National Inventory Report – Greenhouse Gas Sources and Sinks in Canada, 1990-2004*. Ottawa: Minister of the Environment.
2. Environment Canada (2006).
3. Statistics Canada (2006). *Canadian Environmental Sustainability Indicators*. Catalogue no.16-251-XWE. Ottawa: Minister of Industry. Specifically, this publication refers to fine particulate matter, to volatile organic compounds and to nitrogen oxides. For details about the links between automobile usage and polluting emissions, see also H. Frumkin, Frank, L. and Jackson, R.. (2004). *Urban Sprawl and Public Health*. Washington: Island Press.
4. Downs, A. (2002). *Still Stuck in Traffic – Coping with Peak-hour Road Congestion*. Washington: Brookings Institution Press.
5. Technically, these little towns and rural areas belonging to the metropolitan influence zones (MIZ) surrounding census metropolitan areas and census agglomerations are said to be in moderate, weak or no influence MIZ.
6. Downs (2002); Newman and Kenworthy (1999). *Sustainability and Cities*.

Overcoming Automobile Dependence. Washington: Island Press.

7. Turcotte, M. (2008). The difference between city and suburb: How can we measure it? *Canadian Social Trends*, 85. Catalogue no. 11-008-XIE, Ottawa: Minister of Industry.
8. Turcotte (2008).
9. See Turcotte, M. (2008). for more details about the relationship between distance to the city core and neighbourhood density.
10. Although the chart appears to show that neighbourhoods with low density are different than those with medium/high density at more than 10 kilometres from the city core, this difference is not statistically significant.
11. Duany, A., Plater-Zyberk, E. and Speck, J. (2000). *Suburban Nation – The Rise and Sprawl and the Decline of the American Dream*. New York: North Point Press.
12. Gillham, O. (2002). *The Limitless City – A Primer on the Urban Sprawl Debate*. Washington: Island Press.
13. Downs (2002); Newman and Kenworthy (1999).
14. It is impossible to account for all the characteristics of persons who live in different types of neighbourhoods and in particular for all the reasons leading a person to choose one neighbourhood rather than another. For example, it is possible that people who like to travel by car are more likely to establish themselves in peripheral suburbs of low density, while those people who like to walk choose a downtown location. In these cases, it is personal preferences that have a greater influence on the choice of transportation than the physical characteristics of the place of residence. Although this possibility has not been completely discarded by researchers, almost all recent studies seem to suggest that urban development has had a direct impact on the level of automobile dependence (see Cao, X, Mokhtarian, P.L. and Handy, S.L. (2007). *Examining the Impacts of Residential Self-selection on Travel Behavior: Methodologies and Empirical Findings*. Davis: Institute of Transportation Studies. In this article, the authors summarize and comment upon existing studies on this topic.) When people are choosing a neighbourhood in which to live, among other factors they consider are location of their workplace, access to schools and other services, geographic proximity to other family members, and so on. When these criteria are foremost in the choice of neighbourhood, the purchase and use of an automobile can become mandatory for most people.

Table A.1 Characteristics associated with type of transportation used for daily trips by people living in a census metropolitan area (CMA)¹, 2005

	% of persons aged 18 and over making...				% of persons aged 18 and over making...		
	At least one trip as a driver	All trips as a driver	All trips by car		At least one trip as a driver	All trips as a driver	All trips by car
Sex							
Women †	66	49	72	Presence of a child under age 5			
Men	81*	69*	76*	No	73	59	74
Age							
18 to 24 †	57	41	57	Yes †	76*	59	75
25 to 34	74*	58*	73*	Presence of a child age 5 to 12			
35 to 44	80*	65*	77*	No	72*	58*	73*
45 to 54	82*	66*	80*	Yes †	81	63	77
55 to 64	77*	62*	79*	Household income			
65 to 74	70*	57*	78*	Less than \$20,000 †	50	39	55
75 years or older	55	45	67	\$20,000 to \$39,999	68*	55*	70*
Immigration status				\$40,000 to \$59,999	75*	61*	76*
Born in Canada †	76	60	75	\$60,000 to \$99,999	83*	64*	79*
Immigrants (before 1990)	74	61	75	\$100,000 or more	83*	65*	77*
Recent immigrants (1990 to 2005)	55*	45*	60*	Main activity during the last 7 days			
Presence of activity limitations				Employed/looking for work †	80	65	77
Yes/sometimes	69*	54*	71*	Caring for children/keeping house	61*	43*	73*
Yes/often	69*	56*	75	Retired	68*	55*	75
No †	75	60	74	Student	45*	31*	44*
Highest level of educational attainment				Other activity	65*	51*	72*
No secondary diploma †	64	54	73	Day of the week			
Secondary completion	72*	58*	74	Weekday	75*	60*	72*
College or trade diploma	79*	62*	77*	Weekend †	71	55	79
University degree	77*	59*	71	Worked outside the home on the reference day			
				No	68*	52*	73*
				Yes †	81	67	75

1. Metropolitan area boundaries used in the 2005 General Social Survey are those established in the 2001 Census.

† Reference group.

* Statistically different from the reference category ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2005.

Table A.2 Percentage of persons aged 18 and over using public transit for at least one of their trips on the reference day, 2005

	Toronto	Montréal	Vancouver	Ottawa— Gatineau	Calgary	Edmonton	Quebec	Winnipeg	Medium CMAs	Smaller CMAs
	%									
All Census Metropolitan Areas (CMA)	16	18	12	15	12	9	9	10	7	3
Housing density										
High	23	26	20	20	14	22	15	23	10	8
Medium	19	15	10	22	12	9	4	13	9	5
Low	12	10	7	6	12	6	3	9	4	2
Distance from city centre										
Less than 5 km	26	34	22	21	11	16	13	15	11	5
5 to 9 km	31	25	20	21	11	7	7	10	6	3
10 to 14 km	22	17	12	14	11	11	2	8	5	F
15 km or more	11	11	3	6	18	1	3	3	4	F
Administrative boundaries										
Suburban municipalities	9	14	7	10	5	3	5	F	..	..
Central municipality	25	30	23	17	13	11	9	12	..	..

.. not available for a specific reference period.

F too unreliable to be published

Notes: Metropolitan area boundaries used in the 2005 General Social Survey are those established in the 2001 Census. See "What you should know about this study" for a list of the CMAs comprising the medium and smaller CMA categories.

Source: Statistics Canada, General Social Survey, 2005.

Canadians abroad

by Margaret Michalowski and Kelly Tran

Global migration is not a recent phenomenon. For different reasons, people have been making the journey from one location to another throughout history. Today, people move in order to forge new lives for themselves, for education or employment opportunities, for family or for lifestyle reasons. Others move because they are forced to do so by circumstances in their home country. Whatever the reason for migration, the movement of people across borders has had a significant impact on their countries' population. And Canada is no exception: often viewed as a country that is the choice destination for thousands of immigrants, Canadians take pride in accepting new citizens from many different parts of the world. The cumulative effects of this migration are such that, at the turn of the 21st century, two in five Canadians aged 15 years or older were either immigrants themselves or were the children of immigrants.¹

However, the impact of immigration can easily overshadow the other component of migration, namely emigration of Canadians to other parts of the world. In the modern world, advances in transportation have made the global system of migration dynamic and often circulatory, meaning people may move from their birth country to another country, and then subsequently migrate back to their birth country or on to a third country. At the same time, new communications technologies allow them to remain in contact with family and friends around the world. The United Nations

reports that there were upwards of about 177 million international migrants in 2005, an increase from about 75 million 40 years earlier.² The increasingly integrated and interconnected world, and the continuing global competition for skilled migrants, mean that these population movements will persist.

Presently, while there are broad estimates of the number of Canadians who go abroad, there is little by way of information on who leaves and where they go (see "Estimating Canadian emigration"). Nor is much known about the association between destination of emigrants and their characteristics. Do certain destinations attract specific groups of Canadian residents? When they leave, do they leave with the intention of staying abroad permanently or temporarily? The answers to these questions can be varied and complex. Not a lot of concrete information about emigration is available and what is available tends to be fuzzy and based on different concepts of migration and movement. Migration affects the population of two places – the place one goes to as well as the place one leaves. It is the information from the place one leaves that is often fuzzy, although it is possible to draw upon information from the place one goes to in order to understand more about the phenomenon. However, there are numerous systems of migration characterized by various concepts, definitions and thresholds, and it is an onerous undertaking to standardize concepts and make direct comparisons between countries.

The goal of this article is not to provide a complete statistical accounting of the emigration of Canadians. Rather, by examining five countries with which Canada has close ties of kinship and friendship – the United States, the United Kingdom, Australia, Italy and Poland – it seeks to develop a profile of people who leave Canada. The concepts and definitions used are those of the specific country that graciously assisted in providing the best picture they can of the Canadians who reside within their borders.

Where in the world are Canadians?

The Organisation for Economic Cooperation and Development estimates that 1.1 million people who were born in Canada were residing in other OECD countries at the beginning of the 21st century.³ Of these Canadian-born emigrants, the lion's share (82%) resided in the United States. As of the year 2000, over half of the Canadian-born residents of the US (58%) had been living there for over 20 years; another 30% had been there for less than 10 years. Many were so well settled that they evidently had no intention of returning to Canada: by 2000, 46% of Canadian-born emigrants had become naturalized American citizens, according to the 2000 US Census.

Several other OECD countries were home to a substantial number of Canadian-born residents. Most popular in 2000 was the United Kingdom, where an estimated 72,500 Canadians resided.

CST What you should know about this study

This article is not intended to provide a complete statistical accounting of the total number of Canadians residing abroad. Rather, it is intended to utilize the available data in order to better understand the current trends and stock of Canadians residing in selected countries. It is derived from a larger study conducted to assess the feasibility of using the immigration data collected by receiving countries in order to provide information to sending countries about their emigrants. (To obtain more information about this pilot project, visit www.unece.org)

Though Canadians who go abroad select numerous destinations, this report focuses on emigrants who go to five countries: Australia, Italy, Poland, the United Kingdom and the United States. These five countries worked in cooperation with Canada to exchange migratory information for the larger study from which this article is derived. The perspective of migration is from the receiving country, that is, the specific country to which Canadians went. In this sense, emigration from Canada becomes "immigration" to another country, and emigrants from Canada can be viewed as immigrants in the receiving country. Data from Australia are obtained from the Overseas Arrivals and Departures records, which is a passenger card system that collects information on all overseas arrivals to, and departures from, Australia. Italy provided data from its population register, which is a record of persons who are residents of Italian municipalities. Polish data come from the national population register, which includes Polish citizens and foreigners with either permanent residence in Poland or a Polish residence card registered for a temporary stay of more than two months. Data from the United Kingdom come from the International Passenger Survey, which collects information

from passengers travelling through the major airports and seaports of the United Kingdom and produces data on people coming to or leaving the UK. The data from the United States are from the American Community Survey as well as from the Office of Immigration Statistics, which keeps records of applications for lawful entry into the United States.

Because these different data sources have specific purposes in their respective countries, exactly who is considered an "immigrant" in that country is not necessarily consistent across all of the countries included in this study. "Canadians" could be defined in different ways by the receiving countries: the concept could include only those people who were born in Canada, but it could also encompass naturalized Canadian citizens or even someone who simply resided in Canada at some point. Unless otherwise stated, for the purposes of this article, Canadians or Canadian emigrants are defined as individuals who formerly resided in Canada, regardless of place of birth or Canadian citizenship status. This definition encompasses all those who were once residents of Canada but were later residing in another country, regardless of their intentions for permanent, temporary or long-term stay outside Canada.

A permanent emigrant from Canada is somebody who left the country and at the time of their departure indicated that they did not intend to return. In contrast, a long-term or temporary emigrant is somebody who leaves for a specific period of time, usually longer than 12 months, but who intends to one day return to Canada. Not all countries have information on long-term (temporary) migrants or permanent migrants.

Considerably fewer – about 27,300 – lived in Australia, but the majority (61%) had been there for more than 10 years. France and Greece were the only other OECD countries which reported having more than 10,000 Canadian-born residents in the country (Chart 1).

While the OECD data provide a glimpse of the location of Canadians living abroad, it does not provide the full picture. Because the OECD reports only on people who are Canadian-born, missing from the picture are

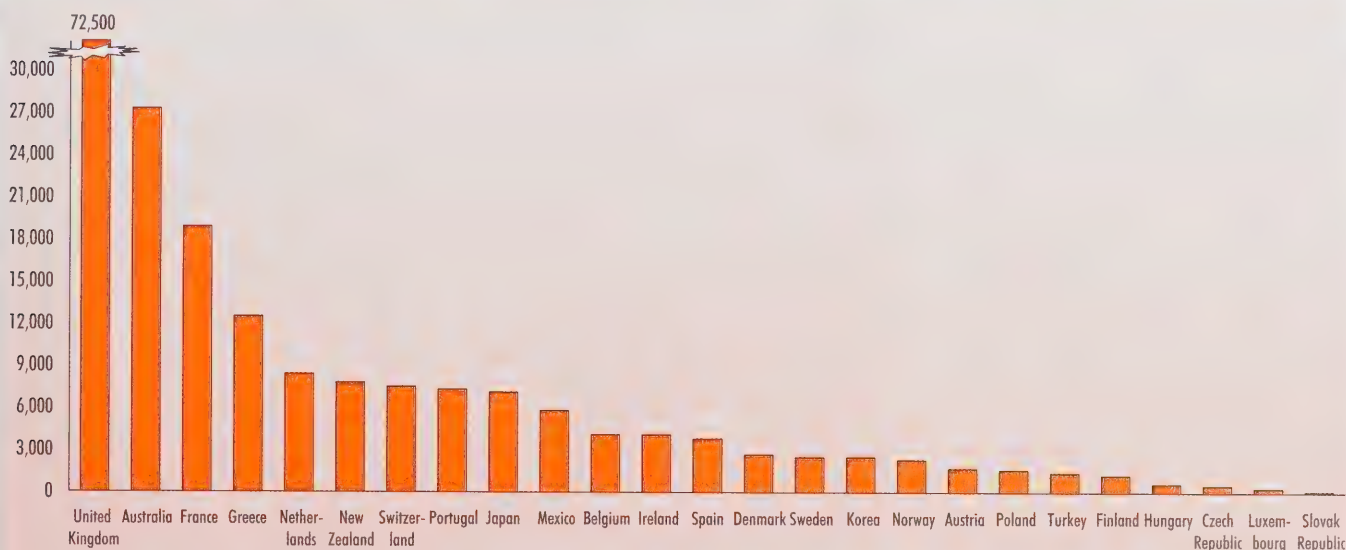
migrating Canadians who were not born in Canada. For example, data from the American Community Survey found that only 43% of Canadians living in the US had been born in Canada. About 32% had been born in the US, while the remaining 25% had drawn their first breath in a third country (that is, neither Canada nor the US). The example provided by Canadian migration to Poland is even more striking: only 1% of Canadians who moved to Poland were Canadian-born, while the vast majority (88%)

had actually returned to their country of birth. Evidently, leaving to live in another country is not confined only to those Canadians who were born in Canada.

Migratory exchanges between Canada and other countries

Much of what is written about Canadians abroad focuses on Canadians residing in the United States. Due to a combination of factors – including a shared land border and similar language, culture

Number of Canadian-born residents, 2000-2001



1. Over 80% of Canadian-born emigrants in OECD countries live in the US.

Source: Dumont, J.C. and Lemaître, G. 2005. *Counting migrants and expatriates: A new perspective*. Social, Employment and Migration Statistics Working Paper. OECD: Paris.

and institutions – there has always been a flow of Canadians who head south of the border either permanently or temporarily. Of the five countries selected for this study, the United States by far welcomes the greatest number of Canadian emigrants. Between 2000 and 2004, an average of about 68,900 Canadians departed for the United States every year; in contrast, an annual average of about 6,100 US residents immigrated to Canada during the same period (Chart 2).

Canada's long history of British settlement means that there are close ties between Canada and the United Kingdom. Many of the immigrants to Canada in the past two centuries have been from the UK, and many second generation Canadians, as well as the third generation and beyond, have strong links to extended family. Therefore, it should not be surprising to see flows of migrants in the opposite direction, as large numbers of Canadians move to the United Kingdom. Between 2000 and

2004, the UK received an average of 8,500 Canadians each year while sending Canada about 5,200 British emigrants.

Immigrants from Italy have also come over many decades. Since the beginning of the 20th century, a large number of Southern Italians have moved to Canada in search of work and improved economic conditions. Many worked on building the railways and when this project was completed, they remained in Canada and settled in the major cities.⁴ The 2001 Census revealed that over 318,000 people born in Italy now call Canada home. Return migration is weak, with fewer than 1,000 Canadians per year leaving Canada to live in Italy during the five-year period 2000 to 2004.

Immigration from Poland has come in three waves: first starting in the 1920s, then after the Second World War and most recently in the 1980s. In 2001, over 182,000 Polish-born persons were living in Canada. About one-quarter of them had immigrated before 1961, while over one-third (38%) had arrived in the 1980s, a

decade of significant political unrest in Poland. Another one-quarter came to Canada in the 1990s. (In fact, Poland was among the top ten source countries of all immigrants entering Canada in the 1990s.) The rate has slowed in recent years, however; from 2000 to 2004, an annual average of 1,200 Polish immigrants arrived in Canada while about 300 Canadians went to Poland.

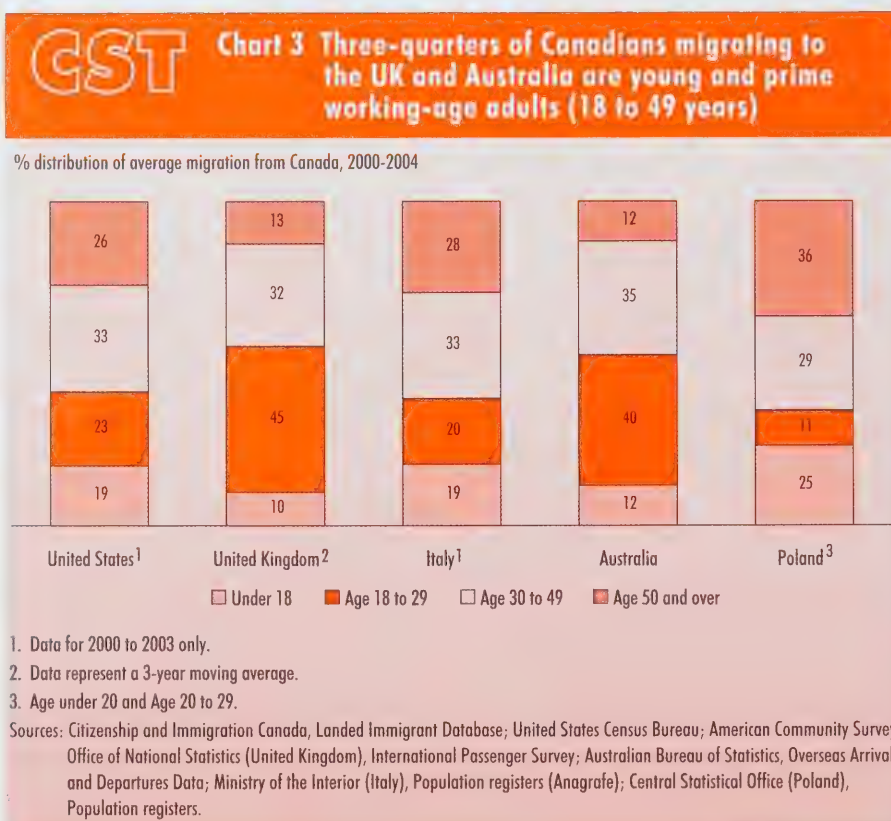
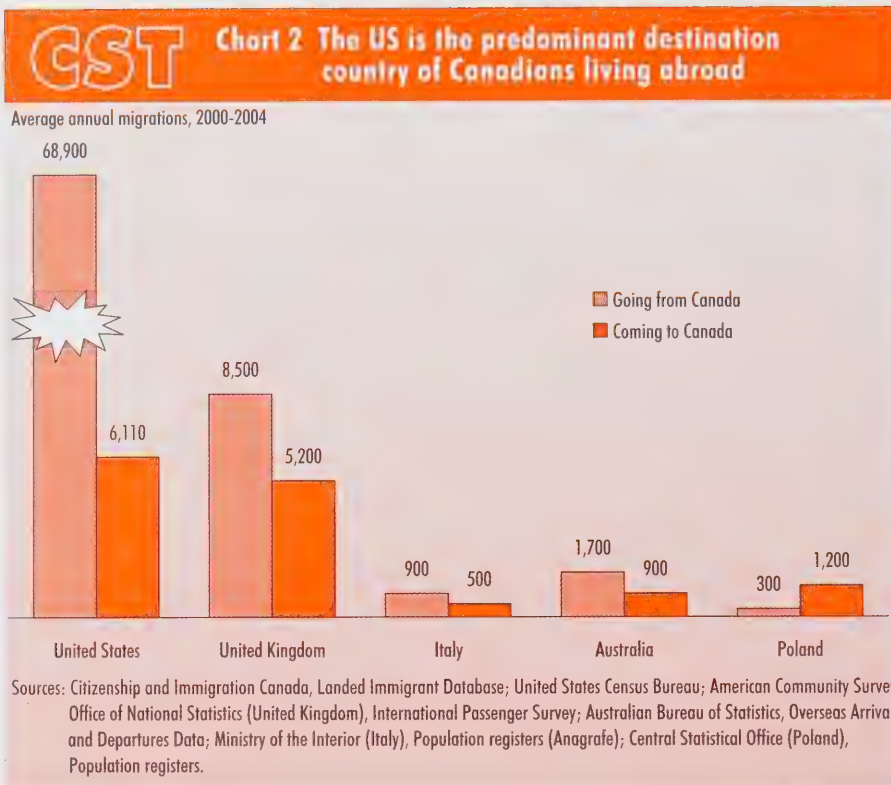
Australia and Canada share much in common including English as an official language, a similar legacy of immigrant settlement and membership in the Commonwealth. The two countries also share some migratory exchange of populations. In the post-war period 1951-71, approximately 36,000 Australians arrived in Canada; by 2001, the Census counted 18,910 Australian-born immigrants living in Canada. In fact, nearly 1,000 immigrants from Australia are admitted to Canada annually; meanwhile, about 1,700 Canadians departed for Australia each year between 2000 and 2004.

With the exception of Poland, the number of people who immigrate to Canada from the other countries in this study is lower than the number of Canadian departures in the first four years of the new millennium. For the United Kingdom, the emigrant-to-immigrant ratio was 1.6 Canadians leaving for every Briton entering Canada; both Australia and Italy had slightly higher ratios of 1.8 and 1.9, respectively. For Poland, it was 0.3 Canadians for every Pole.

Of course, the largest ratio was recorded for flows between the United States and Canada, with Canada sending 11.3 emigrants for every immigrant it received from the US. Keep in mind, however, that these imbalances may in part be artifacts of record-keeping systems used at the border. Canadian immigration numbers do not include returning Canadian citizens or people who enter Canada under different immigration authorizations (such as foreign workers, international students or other non-permanent residents). So while Canadian citizens who go abroad for a period of time and then return to Canada are part of the migratory in-flow, they are not counted in the immigration figures.⁵

Young emigrants head to the US, the UK and Australia

Voluntary migration often takes place when people are in their prime adult years. Migrations are generally not random occurrences in life and the selective nature of migration means that people make decisions to move to another country after completing their post-secondary schooling, when they are in the labour market, when they marry a person who lives in a different country, and so on. At other times, people may migrate because they have decided to retire in another country; and when families migrate, a large number of school-aged children may be migrating with their parents. However, the life course trajectory is such that a large proportion of migrants are often young adults.



According to the *American Community Survey*, 68,900 Canadians crossed the 49th parallel to the United States in 2003.⁶ About 3 in 10 were aged 30 to 49 years; about 2 in 10 were aged 18 to 29. These young adults may be in the US for various reasons, including education or employment; in fact, permanent immigrants to the US are most often admitted under employment-based preferences. People from Canada also go south when they are older, with about 3 in 10 being older than 50. Older migrants are more likely to be Canadian-born than American-born or secondary migrants from other countries (Chart 3).

Although the volume of migration from Canada to the United Kingdom is much smaller – around 8,500 yearly between 2000 and 2004 – it is also concentrated mainly among the young. Nearly half (45%) of all Canadians who were living in the United Kingdom were young adults aged 18 to 29 years old. Another 32% were in their thirties or forties. Those aged 50 and over averaged no more than 13% of the migrants during that four-year period.

The bulk of the Canadian-born population residing in the UK were of prime working age, that is between ages 25 and 54. Employment opportunities are often strong motivating factors in the decision to migrate abroad. According to UK Census data from 2001, 78% of working-age Canadian-born residents of the UK were employed and 3% were looking for work. Another 4% were students and 8% were looking after their home or family.

The other three countries in this study – Australia, Italy and Poland – had much lower annual flows from Canada. On average over the period 2000-04, the yearly numbers ranged from 1,700 people going to Australia to roughly 300 people moving to Poland. A large proportion of those Canadians who chose to relocate to Australia – two in five – were 18- to 29-year-olds. For young people, Australia may be an

attractive destination because of the similarities in language and culture, but also because of the climate, the geography and the appeal of being half a world away from home. In contrast, only about 1 in 10 people who moved from Canada to Australia were age 50 or over.

Migration from Canada to Italy has been relatively stable, and has recently ranged from just over 800 people in 2000 to about 1,000 in 2003 (the most recent data available). A large proportion of these migrants – almost three in ten – were aged 50 years or older; another one-third were between the ages of 30 and 49. In further contrast to those Canadians who chose to relocate to the US, the UK and Australia, the movement of Canadians to Italy is largely of people who were born outside Canada. Older migrants, especially those who return to their birth country, may be attracted by the emotional or cultural ties that remain there. Perhaps going back to their birth country in order to be surrounded by the memories of their youth is a decision many of these older migrants to Italy have taken.

In respect to Canadian migration to Poland, an increasing amount of the flow was also among older people. In 2000, about one-third of migrants were over the age of 50; however, this proportion increased steadily and by 2004, 4 in 10 were age 50 or over. It may be the case that Polish immigrants are returning to Poland in their later years after a period of residence in Canada. This suggestion is supported by other data which show that while 1% of Canadian-born emigrants to Poland were over age 50, 17% of Polish-born emigrants were age 50 or older.

Leaving Canada to go abroad is often temporary

Only Australian data allows the distinction to be made between long-term and permanent migrants. (A long-term migrant is somebody who intends to reside in Australia for at least one year but not necessarily

permanently.) According to these records, the majority of Canadian migration to Australia is long-term rather than permanent. Between 1995 and 2004, an average of 1,250 Canadians moved to Australia in a given year; between 75% and 90% of these people indicated that they only intended to live there on a long-term basis. Australia appears to be a destination of choice among Canadian migrants in the 18 to 29 year age group. Perhaps drawn by travel and educational opportunities, temporary work experience or any number of other reasons, 89% of young Canadian migrants say that while they intend to live in Australia for at least a year, they do not plan to settle on a permanent basis.

Returning home or leaving for the “unknown”

The decision to migrate abroad is a complex one that is conditioned upon age, marital status, economic status and other cultural or lifestyle preferences. It is not necessarily only the Canadian-born population that leaves Canada. Immigrants to Canada may also subsequently migrate, either by returning to their previous country of residence or by taking up residence in another country. For example, it is estimated that 35% of Canadian male immigrants leave Canada within 20 years of arrival, although the majority (60%) have done so within the first year.⁷ But at retirement age, Canadian immigrants are also leaving to return to their country of origin. Whether they return to their birth country permanently or maintain some residency ties to Canada cannot be determined due to the limitations in the data.

The most striking example of the phenomenon of return migration is provided by data from Italy's 2001 Census. These data show that the majority of Canadians who had moved to Italy were Italian-born. In fact, 71% of people who had lived in Canada as late as 2000, but were living in Italy by 2001, were Italian-born. Over half (52%) of these returning immigrants

were over the age of 50. As a point of comparison, just 7% of Canadian-born migrants to Italy were in the same age category.

Polish Census data for 2002 show a similar trend. The majority of those who moved to Poland from Canada were Polish-born, but in this case they tended to be younger. Of those who had resided in Canada in 2001 but were living in Poland in 2002, 87% were Polish-born. The majority (57%) were between the ages of 30 and 49. Only 1% of Canadians in Poland were actually Canadian-born and the vast majority were under 18 years of age, likely due to the return migration of families with Polish-born parents and their Canadian-born children.

Return migration is also found among American-born people who once immigrated to Canada. The 2004 American Community Survey shows that 32% of the people who moved to the US from Canada in 2003 had been born in the US. Another 25% were secondary migrants, that is, people born in neither Canada nor the US but who subsequently emigrated from Canada. Nearly half of migrants were in the age range of 30 to 49 years. The return migration of American-born people shows that much of the migration between Canada and the US is circulatory. Moreover, the large share of migrants who were born in neither Canada nor the US suggests that there is a considerable secondary migration occurring among Canada's foreign-born population.

More about flows South of the border

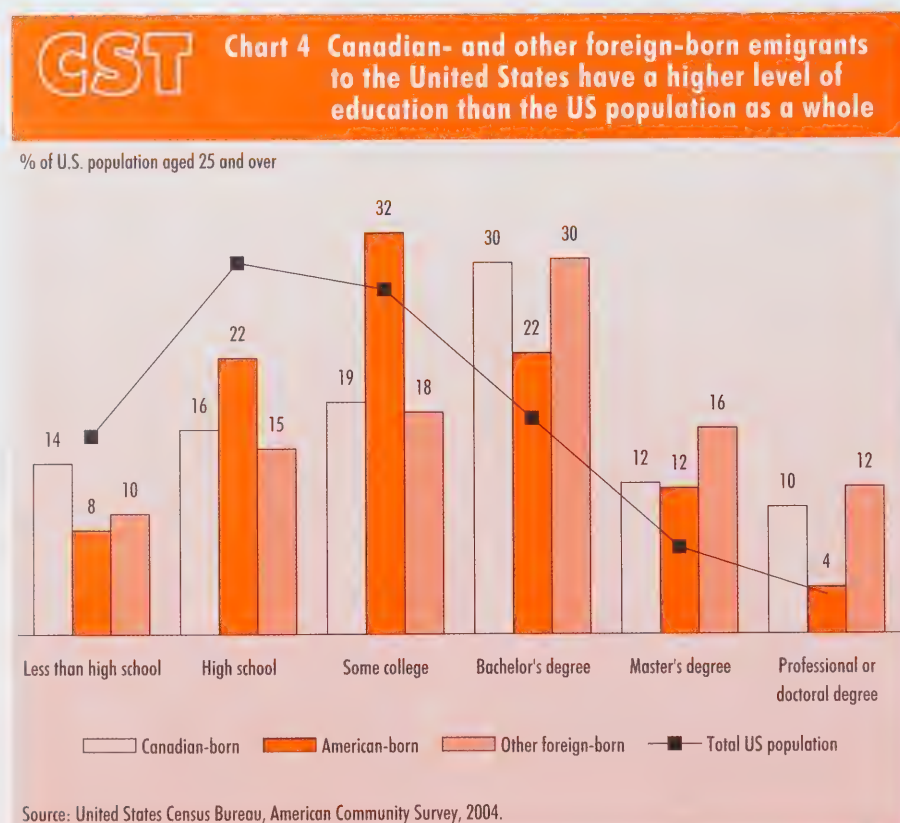
There has always been public discussion about migratory exchanges between Canada and the United States. Much of the focus is on the southerly flow of Canadians into the United States rather than the other way around. This is despite the fact that the United States has consistently been among the top source countries of immigrants to Canada throughout the past century.

Between 1995 and 2004, an annual average of 21,000 in-migrants from Canada were granted permanent residency status in the United States. Canadians are granted 'green cards' to become permanent residents of the US but getting a green card is not the only way Canadians can legally enter the US. Many green card holders may have already been residing in the US for some time, since temporary authorizations account for another large proportion of migratory flow of Canadians to the United States. During the mid-1980s and up to 1999, temporary authorizations such as student visas, temporary work permits and intra-company transfers were relatively stable and did not exceed 20,000. After 2000, the number climbed towards 40,000. But by far the largest number of temporary authorizations held by Canadians are NAFTA permits. The number of both first-time and renewed permits in Canadian hands exceeds 100,000; however, the number of people obtaining a NAFTA authorization for

the first time was never more than 40,000 between 1995 and 2002.⁸

Canadians who migrated South were more highly educated than the population of their host country. Over half of Canadian-born residents in the US aged 25 or older had university education at the bachelor level or higher; this compares with just over one-quarter of all US residents in the same age group. This finding illustrates the selective nature of migration and the loss of highly educated individuals to other countries (Chart 4).

Canadian-born residents are three times less likely to be unemployed than the American-born: 1.7% versus 5.8% in 2000, according to the US Census Bureau. Being highly educated, they tend to be concentrated in more highly skilled or professional jobs. For example, 52% of the employed Canadian-born population worked in a management or professional occupation; another 24% were in sales or office occupations. One-quarter of these workers held positions in the



Canadians abroad include individuals who were once residents of Canada but are now found living in other countries. They may be Canadian-born persons or immigrants to Canada who subsequently moved to another country; Canadians abroad also include people who leave Canada either permanently or temporarily. People who vacation in another country (for instance, snowbirds) are not considered to be living abroad and as such are not included in the target population of this study.

While there is no definitive count of Canadians scattered around the world, some estimates put the number at 2.7 million.¹ Compiling comprehensive information about Canadians living abroad is challenging because there are no complete records of the permanent or temporary exit of everybody who leaves the country. Using the immigration data of the destination countries can be difficult because the definitions of international migrants differ from nation to nation; also, each country specifies its own system of recording the in-migration of peoples across their borders. Where there are different mechanisms for recording these movements, there will be different definitions of migrants and inconsistencies of coverage.

Given the complexity of accounting for the total number of Canadians residing abroad, there are few reliable estimates of their numbers around the world. In spite of the challenges involved in compiling international statistics, international organizations have made some attempts to estimate the number of people residing outside their birth country.

According to a 2006 study, an estimated 1 in 1,000 Canadians leave Canada in a given year. Departure rates generally followed the economic cycle, but other factors were also involved in the decision to leave Canada. For instance, younger working age people of 25 to 34 years were more likely to leave than older people and immigrants had a stronger propensity to leave than people born in Canada.²

While there is little by way of figures on the exact number of people who leave Canada, estimates of emigrants³ (that is, permanent departures only) show that the emigration rate has been low but not negligible. Since 1990, the number of permanent emigrants from Canada annually has exceeded 50,000 only three times. Emigration peaked in 1997, when an estimated 52,800 permanent emigrants left the country, the equivalent of 0.2% of Canada's total population that year. More than offsetting this out-migration, though, has been the increasing volume of immigrants, whose numbers have exceeded 200,000 people annually for most of the 1990s.

Other estimates based on Census Coverage Studies estimate that about 500,000 people who resided in Canada in 1996 but left in a subsequent year were still abroad in 2001. This figure includes everybody who left (whether permanently or only temporarily) and represents a considerable increase from the estimates of 400,000 emigrants calculated for the period 1991-96 and of 325,000 emigrants for 1986-91.⁴

1. Zhang, Kenny. (2006). Recognizing the Canadian Diaspora. *Canada Asia Commentary*, 41. March. Asia Pacific Foundation of Canada.
2. Finnie, Ross. (2006). *International Mobility: Patterns of Exit and Return of Canadians, 1982 to 2003*. Statistics Canada Catalogue no. 11F0019MIE. Working paper no. 288. Ottawa: Minister of Industry.
3. Emigration is estimated from administrative sources of the 'gross flow' of migrants out of Canada. Data to inform these estimates come from several sources, including tax data and the Child Tax Benefit program from the Canada Revenue Agency and from the Office of Immigration Statistics at the United States Department of Homeland Security. Emigration figures are estimates based on a set of assumptions and from data sources which may not have complete coverage. As such, emigration figures are among the most difficult to estimate and those cited provide a glimpse of what the total amount of emigration may be. Statistics Canada *Annual Demographic Statistics*, 2005. Catalogue no. 91-213-XPB. Ottawa: Minister of Industry.
4. These numbers do not include everybody who left Canada over each of the 5-year periods, but only those who left and had not returned by the end of the period.

education, health or social services industry, while another 13% worked in a professional, scientific, management or administrative industry.⁹

Summary

Canada is often thought of as an immigrant-receiving country, but it

is also a player on the world stage as a source country of migrants. Whether Canadian migration abroad is temporary or permanent, long term or short term, far or near, Canadians are making their mark in other countries.

Using selective destinations, this article has shown that Canadian emigration abroad is just as selective as in-migration to Canada. Indeed, many Canadians with high levels of education depart for other parts of the world, and their employment levels are demonstrably higher in

their settled countries than those of the host countries' populations. The United States is still by far the largest recipient of Canadians on either a permanent or a temporary basis. Other countries such as the United Kingdom and Australia also welcome Canadians. Italy and Poland, which have sent migrants to Canada in the past, are starting to see a trickle of their migrants return in their golden years.

Emigration is often a part of circulatory movement, as those who were former in-migrants to Canada in previous decades become out-migrants by returning to their birth country. It would be interesting to compare the emigrants' profile shown in this study with those of Canadian emigrants to other countries, especially in Asia. Unfortunately, expanding this analysis is greatly restricted by lack of data.

GST

Margaret Michalowski is Chief, Census Subject Matter Program, and **Kelly Tran** is an analyst with Social and Aboriginal Statistics Division, Statistics Canada.

1. Immigration is increasingly seen as a main driver of population growth. Between 1996 and 2001, 87% of the growth in Canada's population was attributed to recent immigrants who arrived during the period. Within the next few decades, net migration could be the sole source of population growth in Canada as the rate of natural increase declines in proportion to the net migration rate.
2. This number does not include the number of refugees around the world, which is usually considered part of the international migration flows. In 2000 the United Nations estimated the number of refugees around the world to be around 13 million. Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. *Trends in Total Migrant Stock: The 2005 Revision*. <http://esa.un.org/migration>. Accessed on January 8, 2007.
3. Dumont, J.C. and Lemaitre, G. (2005). Counting Migrants and Expatriates: A New Perspective. *Social, Employment and Migration Statistics Working Papers No. 25*. Organisation for Economic Cooperation

and Development: Paris. The OECD comprises 30 countries, mainly from the Western hemisphere and some Asian countries including Japan and South Korea as well as Australia and New Zealand. The OECD member countries represent 20% of the world's population.

4. Knowles, V. (2000). *Forging our Legacy: Canadian Citizenship and Immigration, 1900-1977*. Citizenship and Immigration Canada. <http://www.cic.gc.ca/english/resources/publications/legacy/index.asp>. Accessed on May 1, 2006.
5. While it would appear that there is a mass exodus of people from Canada to these countries compared to the number who come into Canada, official population estimates show that overall, for every 1 emigrant out of Canada, there were 6 people who immigrated to Canada. This translates into a ratio of less than 0.2. This demonstrates that although there is some population loss due to emigration, the out-migration is more than offset by the number of people who immigrate to Canada. *Annual Demographic Estimates: Canada, Provinces and Territories, 2005-2006*. Statistics Canada Catalogue no. 91-215-XWE. Ottawa: Minister of Industry. *International migrants, by age group and sex, Canada, provinces, and territories, annual (persons)*. CANSIM Table 051-0011.
6. An even higher proportion (48%) of the foreign-born moving from Canada to the United States were 30 to 49 years old.
7. Adyemir, A. and Robinson C. (2006). Return and Onward Migration among Working Age Men. *Analytical Studies Branch Research Paper Series*. Statistics Canada Catalogue no. 11F0019MIE – No. 273. Ottawa: Minister of Industry.
8. Another way of examining out-migration from Canada to the US is to look at the volume of in-migrants who were new arrivals, that is, those who actually moved to the US during the year. The Office of Immigration Statistics data show that the number of people granted permanent residency was relatively stable over the 1995 to 2004 period, not exceeding 5,500 persons or 2% of all those who were granted permanent residency in the United States in 2005. United States. *Yearbook of Immigration Statistics, 2005*. Department of Homeland Security: Washington, D.C.
9. U.S. Census Bureau. Census 2000 Special Tabulations (STP-159).

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Who gets any sleep these days? Sleep patterns of Canadians

by Matt Hurst

Sleep is something we all need. One third of our lives is spent sleeping. When we don't get enough sleep, our productivity and behaviour are affected. This impacts the quality of work we do, and the quality of our family and personal life at home. It affects our ability to get along and network with others, which is considerably diminished if we are "grouchy" from lack of sleep.¹ Sleep also plays an important role in our personal health. Lack of sleep is associated with increased risk of heart disease, stroke, diabetes, obesity and depression.²

So there are numerous reasons why it is important to get a good night's sleep. Quantifying this is tricky because what constitutes a good night's sleep varies quite a bit from person to person. Experts say that most adults need somewhere between 7 and 9 hours of sleep every night to feel refreshed,³ underscoring the variability in what "enough" sleep means for different people.

However, comparing groups of people in different job and family situations can help to identify influences, apart from our bodies' physiology, that affect our sleep.

In this article, we look at how work, family characteristics and time stress affect sleep times of Canadians aged 15 and over. At the same time, we focus on the differences in sleep times consistently reported between men and women.

Men sleep less than women

It may be hard to convince some people that men sleep less than women. The pop culture image of the superwoman, who continues to do many of the traditional "woman's jobs" in the family as well as being an equal breadwinner, suggests that women should have no time to sleep at all. However, studies consistently find that women sleep more than men.

A previous Canadian study based on both the 1998 and 1992 General Social Survey (GSS) results⁴ confirmed this conclusion, as did a recent article on the epidemiology of sleep in the U.S.⁵ There is no standard explanation for why men and women sleep different amounts, although a Finnish study suggested one possible interpretation may be that women's need for sleep is greater than men's.⁶

The 2005 GSS confirms that men sleep less than women. In their sleep diary, respondents aged 15 and over were asked to record the time they fell asleep and the time they woke up. The data from these diaries show that men slept for an average of 8 hours and 7 minutes, about 11 minutes less than women (Table 1).

The belief that women suffer more disturbed sleep because they wake more easily is also confirmed. Indeed, the GSS does show that although

women sleep more than men, they reported a higher rate of trouble falling asleep or staying asleep: 35% of women versus only 25% of men, a 10 percentage point difference (Table 2).

While sleep quality may seem to offer a possible explanation for the difference we see in reported sleep times between the genders, men sleep less than women whether they report having problems sleeping or not. Further research is warranted to explore the impact of quality of sleep on the sleeping habits of Canadian adults.

Working full-time makes a difference

Overall, the more we work, the less we sleep. According to the GSS diary, working full-time translated into 24 minutes less sleep compared to not being in the labour force.

When we look at labour force attachment by gender, it is clear that working full-time is a key factor associated with the gender sleep gap (Chart 1). Indeed, the data confirm that men who work full-time sleep 14 minutes less than women who work full-time, or about 85 hours or 3.5 days less sleep per year. However, for Canadians who work part-time or have no employment, there is no difference between the sexes in terms of sleep time.

	Both sexes	Men	Women		Both sexes	Men	Women
	minutes (480 minutes = 8 hours)				minutes (480 minutes = 8 hours)		
Average	492	487	498*	When you need more time, do you tend to cut back on your sleep?			
Children under 15 years old				No †	498	492	505*
No children †	498	491	503*	Yes	486 ^a	481 ^a	491 ^{a*}
1 child	481 ^a	476 ^a	486 ^a	Exercised			
2 or more children	473 ^a	466 ^a	478 ^a	No †	493	487	499*
Age				Yes	483	485	480 ^a
15 to 24	522 ^a	517 ^a	527 ^a	Shift work			
25 to 39 †	485	483	487	Daytime schedule †	481	474	488*
40 to 59	480	472	487*	Other	488	482	495
60 and over	500 ^a	491	508 ^{a*}	Personal income (\$)			
Marital status				0 to 19,999	510 ^a	509 ^a	510 ^a
Married (includes common-law) †	485	478	493*	20,000 to 39,999 †	484	484	485
Widowed	502 ^a	487	506 ^a	40,000 to 59,999	473 ^a	472	476
Separated or divorced	484	485	484	60,000 or more	470 ^a	466 ^a	479
Single (never married)	509 ^a	506 ^a	513 ^a	Paid work (minutes)			
Time crunch index of time stress related questions				None	507 ^a	505	508 ^a
Low	505 ^a	499 ^a	511 ^{a*}	1 to 240 †	493	498	488
Medium †	489	485	494*	241 to 420	490	477	500
High	476 ^a	464 ^a	486 ^{a*}	421 to 540	478 ^a	473 ^a	484
Do you have trouble falling asleep or staying asleep?				541 and over	452 ^a	450 ^a	455 ^a
No †	495	489	502*	Commute time for workers (minutes)			
Yes	486 ^a	479 ^a	492 ^{a*}	1 to 30 †	483	475	491*
Do you consider yourself a workaholic?				31 to 60	476	472	482
No †	498	493	503*	60 and over	461 ^a	451 ^a	474 ^{a*}
Yes	477 ^a	470 ^a	484 ^{a*}	Day of week			
Do you feel trapped in a daily routine?				Sunday to Thursday †	486	480	493*
No †	495	491	499*	Friday	505 ^a	506 ^a	505
Yes	488 ^a	478 ^a	496*	Saturday	510 ^a	503 ^a	516 ^a
Do you feel constantly under stress?							
No †	499	493	505*				
Yes	481 ^a	472 ^a	487 ^{a*}				

† Reference group.

* Statistically significant difference from men at $p < 0.05$.^a Statistically significant difference from the reference group at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

Shift work and problems sleeping

Over one quarter of Canadian workers have non-traditional work schedules, often referred to as shift work. It comes in many forms—a regular evening, night or graveyard shift, rotating or split shift, on call, casual or irregular work schedule—but almost all can affect a person's health, since the night is the body's most natural time to heal and regenerate.

Not surprisingly, shift work has a significant effect on worker fatigue,⁷

and affects quality of sleep for both men and women shift workers.⁸ When work schedules creep into the night, they create a non-typical sleep schedule that disturbs the body's natural pattern of rest and rejuvenation. Multiple studies show that the disruption of natural biological rhythms is related to a variety of physical and mental problems, including cardiovascular disease, hypertension, asthma, diabetes and depression.⁹

While "the most common health complaint of shift workers is lack of

sleep,"¹⁰ the GSS diary results show that the issue is more complex. Workers on a daytime schedule slept 8 hours and 1 minute on average; Canadians with non-typical work schedules slept for a similar amount of time. But it is important to note that the quality of sleep is different. Fully one-third of workers with non-typical schedules said they had problems falling asleep or staying asleep compared to only one-quarter of workers with regular daytime jobs.

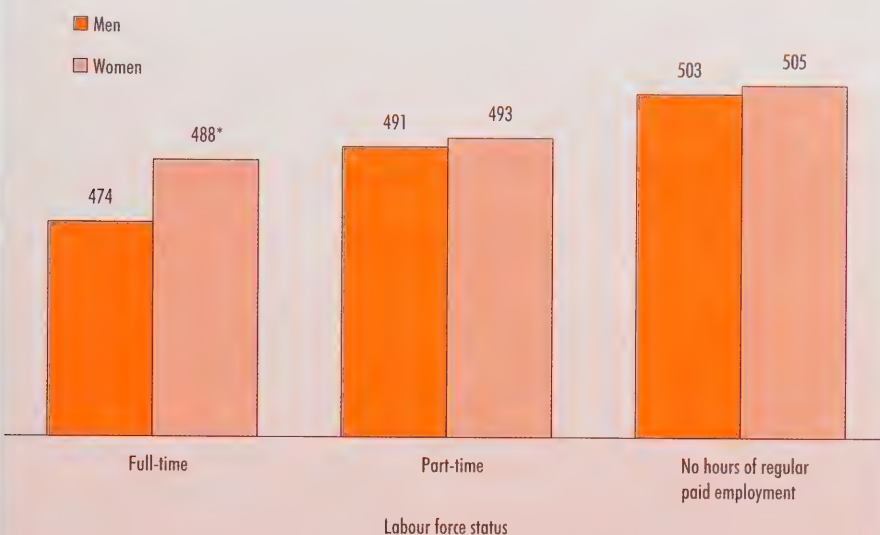
Table 2 More Canadian women than men reported problems falling asleep or staying asleep

	Both sexes	Men	Women
	percentage		
Average	30	25	35*
Children under 15 years old			
No children †	30	25	36*
1 child	30	25	35*
2 or more children	27 ^a	25	29 ^a
Shift work			
Daytime schedule †	26	21	32*
Other	34 ^a	31 ^a	38 ^{a*}

† Reference group.

* Statistically significant difference from men at $p < 0.05$.^a Statistically significant difference from the reference group at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

Chart 1 Working full time makes a difference to men's sleep timeMinutes of sleep
480 minutes = 8 hours* Statistically significant difference from men at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

Less sleep with higher income, longer work days and commuting

According to the 2005 GSS, Canadians with personal income of \$60,000 or more slept 7 hours and 50 minutes on average. In contrast, their lower income counterparts making less

than \$20,000 slept 40 minutes more at night. Supplementary analysis of people in the labour force confirms this trend (results not shown).

High-income Canadians tend to dedicate more time to their paid work, spend less time with their children and less time engaged in leisure

activities; the large majority also feels rushed more than a few times a week.¹¹ So, it is no surprise that this has an impact on their sleep.

Yet, whatever a person's income, working long hours means getting less sleep. On average, people who had worked for more than 9 hours on the diary day slept for only 7 hours and 32 minutes; this was 41 minutes less per night than people who had worked for less than 4 hours. And it was almost an hour's less sleep (55 minutes) than that reported by people who did not work any paid hours at all.

Among women and men who worked fewer than 9 hours per day, men slept 12 minutes less than the women on average. This difference disappears once workers are putting in more than 9 hours. Men and women who work over 9 hours during the day sleep almost the same amount at night, that is, about 7 hours 30 minutes.

Commuting, as well, has a negative impact on sleep. U.S. researchers were recently surprised to find that some Americans are cutting into their sleep time—not to spend time with family, for leisure activities or even to watch TV—but in order to manage their daily commute.^{12,13}

For Canadians, there is no question that long commuters sleep less than others. People with long commutes of an hour or more per day reported that their sleep lasted about 7 hours and 41 minutes. People with short commutes (1 to 30 minutes) slept on average 22 minutes more. Once again, men tended to sleep less than women.

Family and sleep

On the whole, married Canadians (including common-law) sleep less than the unmarried. Specifically, people living with a partner slept about 8 hours 5 minutes a night; single people (never married) slept 8 hours 29 minutes a night, or 24 minutes more; while widowed Canadians slept about 17 minutes more; those separated/divorced slept

about the same as those living with a partner.

Men living with a partner slept 7 hours 58 minutes, 15 minutes less than their women counterparts. There were no differences between the sexes among the unmarried.

Kids deprive parents of sleep

It is an age old truth that kids can deprive their parents of sleep, so raising kids explains why some Canadians sleep less than others. In 2004, data from the U.S. reports that Americans with children under age 11 slept for about 6 hours and 48 minutes a night, slightly less than the 7 hours reported for the population as a whole.¹⁴ This phenomenon is similar to the one we find in Canada with the 2005 GSS.

Canadians with no children in the household got, on average, 8 hours 18 minutes of sleep. In households with children under the age of 15, parents slept less. And the more children they had, the less sleep they got. Those with at least two children slept 25 minutes less, while parents

with only one child slept 17 minutes less.

There was no statistically significant difference in the average amount of sleep mothers and fathers got in households with children. However, when there were no younger children under 15 in the family, men did sleep about 12 minutes less than women, at 8 hours 11 minutes versus 8 hours 23 minutes.

In a similar way, when mothers and fathers spend more time caring for children under 15, they both get less sleep and the gender gap closes. Specifically, when men gave up to 90 minutes of care, they slept less than their female counterparts. When men and women both spent over 90 minutes caring for their children, there was no difference between how much fathers and mothers slept. So, the gender gap closes as men and women spend more time taking care of young children (Chart 2).

Dual-parent families with children under 15 years old slept 16 minutes less than those without children. This is not surprising since families

with children generally have busier schedules that prolong the day and may shorten the time parents have available for sleep. However, the sleep times of unmarried Canadians were the same, whether or not there were younger children in the household.

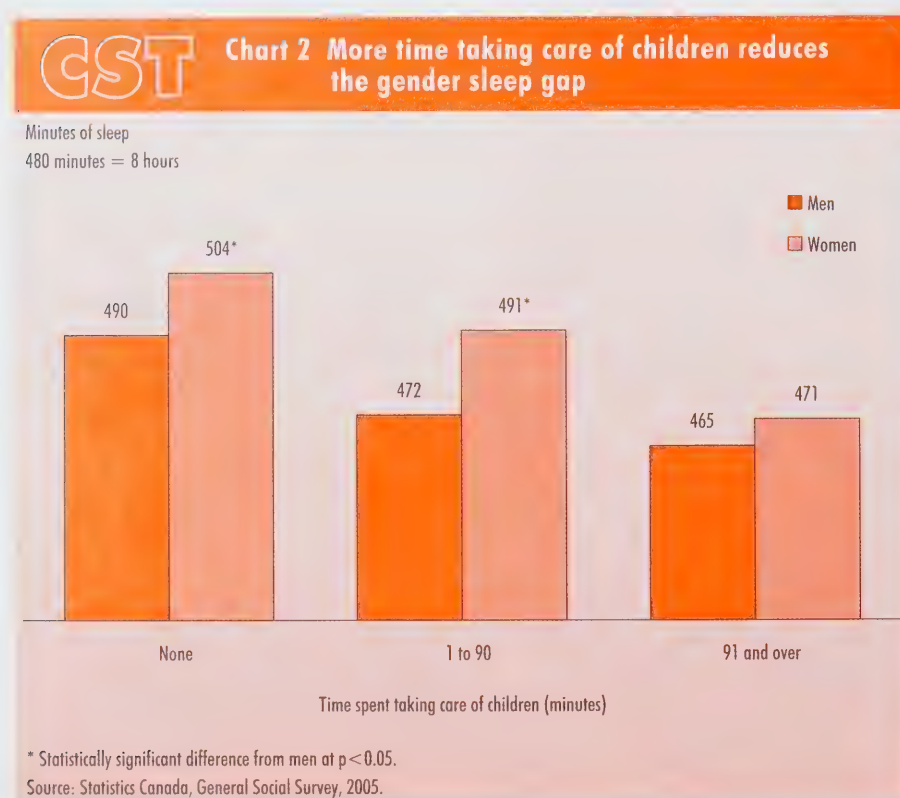
Being stressed for time affects sleep

As common sense would suggest, the GSS finds that people who sleep less are the ones who feel really pressed for time in their daily lives (see "What you should know about this study" for definitions). Canadians who reported feeling highly time-crunched slept almost half an hour less than people who indicated they have a low level of time stress.

Time stress reduces the amount of sleep everyone gets: men who are highly time crunched get 35 minutes less than those who report little time stress; similarly, women get 25 minutes less sleep. On the whole, men still sleep fewer minutes per night than women, regardless of their time stress level.

When we break down the components of the time crunch scale, results for several of the component questions are significant. People who reported that they are workaholics, not surprisingly, sleep about 21 minutes less than non-workaholics, at 7 hours 57 minutes versus 8 hours 18 minutes. This translates into about 130 hours, or almost 5.5 days less per year. Respondents to two other questions—feeling trapped in your daily routine and feeling constantly under stress to accomplish things during the day—reported very similar results to the workaholics.

Almost half of Canadians say they cut back on their sleep when they need more time. They also sleep less—by about 12 minutes—relative to those who do not sacrifice their sleep in an attempt to accomplish more during the day. This finding is similar to results reported for 1998 and 1992.¹⁵



GST What you should know about this study

This article is based on data collected by Statistics Canada's 2005 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. For the fourth time in Canada, the GSS has collected national level time use data.

The 2005 GSS asked respondents aged 15 and over living in private households in the 10 provinces to complete a time use diary. Data were collected for over 19,500 respondents representing 26.1 million Canadians. The diary provides a detailed record of the time spent on all activities in which respondents participated on the diary day, including sleep time. Respondents were asked to record the time they fell asleep the evening of the diary day and the time at which they woke up the next morning.

In addition to the time use diary, the 2005 questionnaire covers perceptions of time stress, sleep, social networks, transportation, and cultural and sports activities.

The study selected Canadians who reported being asleep at 4:00 o'clock in the morning after the diary day. Respondents who were not asleep at this time are excluded (4.3%), since no sleep duration data was recorded for them. These people account for approximately 10% of the sample size.

Supplementary analysis using other sleep information from the survey shows this exclusion has no effect on estimates.

Time stress: The GSS asked a series of questions about time stress. By grouping people by the number of yes and no responses, it is possible to look at the sleep levels of low, medium and highly stressed Canadians. People were categorized as having low time stress if they answered yes to 0 to 2 questions, having a medium level of stress if they answered 3 to 5, and a high level of stress if they answered 6 to 10.

Employment: Full-time employment refers to working 30 or more hours a week. Part-time work refers to working less than 30 hours a week. Employment definitions do not include students.

Married: Includes people who are married and those who are living in a common-law relationship.

The unmarried: People who are widowed, separated/divorced or single (never married).

Child care: Includes all activities performed to take care of children, such as getting them ready for school, teaching them, and putting them to bed.

Exercise: Includes yoga, weight lifting and related activities.

Exercise affects how much women sleep

Exercise is a way to relieve stress accumulated during the day. Experts suggest that exercise can improve the body's ability to sleep, as long as it is done more than three hours before bed time.¹⁶ But interestingly, the GSS results for men show no statistically significant difference in sleep times between those who exercised and those who did not: both groups sleep for just over 8 hours a night. However, their quality of sleep does change significantly: the men who exercised had fewer problems sleeping.

Exercise did influence women's sleep times. Women who exercised slept 19 minutes less than those who did not. This result is somewhat curious since we would expect

exercise to lengthen the sleep period, but the explanation is quite simple.

According to the GSS sleep diaries, women who exercised got up earlier in the morning. Perhaps they wake up early to go to the gym or to jog around the neighbourhood. Getting the exercise rather than the sleep may have been worth it since fewer of these women reported they had trouble falling asleep or staying asleep, at 29% compared to 35% of women who did not exercise.

Summary

The amount of sleep we get is important for our health and our ability to interact and be sociable with others. With today's hectic lifestyles, it can be hard to find the time for basic activities—even sleep.

Sleep needs differ from person to person, depending on their unique physiological requirements, so it is impossible to state that any one number is the "right amount of sleep." But, comparing work and family characteristics can pinpoint whether certain groups in Canada are getting more or less sleep than others.

Single (never married) and widowed Canadians had the highest average levels of sleep compared to people living with a partner and those separated or divorced. Compared to Canadians with no children, those with 2 or more children averaged 25 minutes less of sleep.

Working longer hours was associated with sleeping less, as was higher levels of income. In fact, making over \$60,000 per year was

CST Snooze button used more on the weekend

It is common knowledge that many people use the weekend to catch up on sleep they don't get during work nights. In a Canadian study that analyzed how workers spend their weekend, results showed that the majority of full-time employed Canadians sleep in on the weekend.¹

For work weeknights (Sunday through Thursday), the average amount of sleep hovered around the 8 hour 6 minute mark. But when the weekend comes around, we tend to sleep an additional 19 minutes or more. Although men slept 13 minutes less than women on work nights, there is no difference between the sexes during the weekend.

Most people have slept in on the weekend at one time or another. For many, it is a weekly ritual. On Sunday morning, Canadians slept in almost an hour later to 7:50 a.m., compared to the average wake up time for work nights, 6:54 a.m.

Overall, men and women both tended to go to bed at about the same time, (10:56 p.m. for men and 10:55 p.m. for women). Since men slept 11 minutes less on average, they woke up 10 minutes earlier than women. This difference exists for men and women living with a partner, though not for unmarried Canadians.

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	Both sexes	Men	Women
Wake up times in Canada (a.m.)			
Average	7:08	7:03	7:13*
Day of week			
Monday to Friday †	6:54	6:49	7:00*
Saturday	7:33 ^a	7:33 ^a	7:34 ^a
Sunday	7:50 ^a	7:46 ^a	7:54 ^a
Marital status			
Married (includes common-law) †	6:53	6:44	7:01*
Widowed	7:05 ^a	6:48	7:08
Separated or divorced	6:59	6:57	7:01
Single (never married)	7:48 ^a	7:49 ^a	7:46 ^a

† Reference group.

* Statistically significant difference from men at $p < 0.05$.

^a Statistically significant difference from the reference group at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

associated with sleeping 40 minutes less than people who made less than \$20,000. For workers, commutes over 60 minutes cut sleep back by about 22 minutes on average, compared to workers with shorter commutes of 1 to 30 minutes.

One key demographic difference is between men and women. In 2005,

men slept 8 hours and 7 minutes, 11 minutes less than women. Although women sleep more than men, they reported a higher rate of trouble falling asleep or staying asleep.

The gender sleep difference disappears for people who care for children over 90 minutes a day, for

unmarried Canadians, for part-time workers and people not in the labour force, and for the weekend nights of Friday and Saturday.

The gender gap remains for men and women that fall into the following groups: work full-time; have no children living in the household; and, live with a partner.

CST

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As part of its contribution to dissemination of Census findings, Canadian Social Trends is highlighting some of the key social trends observed in the 2006 Census of Population. In this issue, we present a brief adaptation of Immigration in Canada: A Portrait of the Foreign-born Population, 2006 Census (Catalogue no. 97-557).

Immigration: Driver of population growth

New data from the 2006 Census show that the proportion of Canada's population who were born outside the country reached its highest level in 75 years. The census enumerated 6,186,950 foreign-born in Canada in 2006. They represented virtually one in five (19.8%) of the total population, the highest proportion since 1931.

Overall, Canada's total population increased by 1.6 million between 2001 and 2006, a growth rate of 5.4%. Newcomers who arrived in the country between January 1, 2001 and May 16, 2006 were responsible for 69.3% of this population growth.

Immigrants came from many countries

Among the more than 1.1 million recent immigrants who arrived between 2001 and 2006, 58.3% were born in Asian countries, including the Middle East.

Fully 14% of recent immigrants who arrived between 2001 and 2006 came from the People's Republic of China (PRC). The PRC was followed by India (11.6% of new immigrants), the Philippines (7%) and Pakistan (5.2%), just as in 2001. In addition, South Korea accounted for 3.2% of newcomers and Iran for 2.5%.

Immigrants from Europe accounted for 16.1% of recent immigrants, with the two most common source countries being Romania and the United Kingdom. Formerly, most European newcomers came from the United Kingdom, Italy, Germany, the Netherlands and Portugal.

Recent immigrants from Central and South America and the Caribbean accounted for 10.8% of all newcomers, up slightly from 8.9% in 2001. Colombia and Mexico were the two leading source countries of recent immigrants from that region. As well, there was a slight increase in the share of recent immigrants from Africa – nearly 10.6% compared with less than 10% in earlier years.

Linguistic diversity of the immigrant population

In 2006, nearly 150 languages were reported as a mother tongue among the foreign-born population. (Mother tongue is defined as the first language a person has learned at home in childhood and still understands at the time of the census.)

The 2006 Census showed that 70.2% of the foreign-born population had a mother tongue other than English or French, up from 67.5% in 2001. The linguistic profile of these immigrants reflected the leading source countries of immigrants to Canada from different waves.

Of the foreign-born who reported mother tongue(s) other than English or French, the largest proportion (18.6%) reported Chinese, including the various dialects, such as Cantonese and Mandarin. It was followed by Italian (6.6%), Punjabi (5.9%), Spanish (5.8%), German (5.4%), Tagalog (4.8%) and Arabic (4.7%).

Top 10 country of birth of recent immigrants, 1981 to 2006

Rank	2006 Census	2001 Census	1996 Census	1991 Census	1981 Census
1	People's Republic of China	People's Republic of China	Hong Kong	Hong Kong	United Kingdom
2	India	India	People's Republic of China	Poland	Viet Nam
3	Philippines	Philippines	India	People's Republic of China	United States
4	Pakistan	Pakistan	Philippines	India	India
5	United States	Hong Kong	Sri Lanka	Philippines	Philippines
6	South Korea	Iran	Poland	United Kingdom	Jamaica
7	Romania	Taiwan	Taiwan	Viet Nam	Hong Kong
8	Iran	United States	Viet Nam	United States	Portugal
9	United Kingdom	South Korea	United States	Lebanon	Taiwan
10	Colombia	Sri Lanka	United Kingdom	Portugal	People's Republic of China

Note: "Recent immigrants" refers to landed immigrants who arrived in Canada within five years prior to a given census.

Source: Statistics Canada, Census of Population, 2006.

Most immigrants reported knowledge of English and/or French

The overwhelming majority of newcomers (90.7%) reported that they could converse in English and/or French. Furthermore, use of English and/or French increased as immigrants lived in Canada longer. Among the foreign-born population who came before 1961 and had a mother tongue other than English or French, a majority (70.2%) reported speaking an official language most often at home in 2006. In contrast, the majority (74.4%) of newcomers who did not have English or French mother tongue spoke a non-official language most often at home.

Higher proportion of recent immigrants in the younger age groups

People tend to migrate while they are young. As a result, the immigrants who arrived in Canada since 2001 were over-represented in the younger age brackets.

In 2006, 57.3% of recent immigrants were in the prime-working age group of 25 to 54, compared with only 42.3% of the Canadian-born population. Together, recent immigrants to Canada accounted for 3.9% of the population in this age group.

Children aged 14 and under accounted for one in five recent immigrants to Canada, and youth aged 15 to 24 for 15.1%. Both these proportions are similar to those of the Canadian-born population.

At the other end of the age spectrum, only 3.4% of immigrants who came to Canada in the period 2001-2006 were aged 65 and over, versus 11.5% of the Canadian-born.

Immigrants in the provinces and territories

Ontario, Quebec and British Columbia received 85.8% of the newcomers who arrived in Canada between 2001 and 2006. Ontario took in 52.3% of the recent immigrants, British Columbia 16% and Quebec 17.5% of recent immigrants.

The Atlantic region attracted a slightly larger share of recent immigrants who came to Canada between 2001 and 2006. During this period, an estimated 13,500 recent immigrants settled in the Atlantic region, or 1.2% of the 1.1 million newcomers who arrived in Canada in the last five years. During the previous five-year period of 1996 and 2001, 1% of newcomers settled in Atlantic Canada.

The United States was the top source country of newcomers to Nova Scotia, New Brunswick and Prince Edward Island. The United Kingdom was the top source country for Newfoundland and Labrador.

The 2006 Census enumerated a total of 851,600 foreign-born residents in Quebec, an increase of 20.5% from 2001. This was higher than the 13.6% growth rate in the foreign-born population for the entire country during this period.

People born outside Canada accounted for 11.5% of Quebec's total population in 2006, the highest proportion ever in the province's history. Most of Quebec's foreign-born chose to live in the CMA of Montréal (86.9%). It was followed by the CMA of Québec (3.1%), the Quebec portion of Ottawa Gatineau (2.7%) and Sherbrooke (1.2%).

Ontario continued to be the province of choice for more than half (52.3%) of the 1.1 million newcomers who arrived in Canada during the past five years. In total, the census enumerated 3,398,700 foreign-born individuals, who represented 28.3% of the province's population, the highest proportion in Ontario's history.

Most foreign-born Ontario residents lived in the CMA of Toronto (68.3%). Significant proportions of the province's foreign-born population also lived in the Ontario part of Ottawa - Gatineau (5.3%), Hamilton (4.9%), Kitchener (3%), London (2.6%) and Windsor (2.2%).

A growing share of recent immigrants chose to settle in both Alberta and Manitoba during the past five years. About 9.3%, or 103,700, of the new immigrants who came to Canada settled in Alberta.

Similarly, an estimated 31,200 newcomers settled in Manitoba, about 2.8% of the total recent immigrants. The situation in Saskatchewan was relatively unchanged from the last census.

About 16%, or 177,800, of the 1.1 million newest immigrants who came to Canada during the past five years settled in British Columbia. They accounted for 27.5% of the province's population, up from 26.1% in 2001.

Only about 1,000 newcomers, about 0.1% of all recent immigrants entering Canada, chose to settle in the territories. The Philippines was the leading source country, accounting for 24.5% of these recent arrivals.

Distribution of population by immigrant status and place of residence, 2006

Place of residence	Population			Ratio of recent immigrants to total population ³
	Total	Total immigrants ¹	Recent immigrants ²	
Canada	100.0	100.0	100.0	...
Newfoundland and Labrador	1.6	0.1	0.1	0.1
Prince Edward Island	0.4	0.1	0.1	0.2
Nova Scotia	2.9	0.7	0.6	0.2
New Brunswick	2.3	0.4	0.4	0.2
Québec	23.8	13.8	17.5	0.7
Ontario	38.5	54.9	52.3	1.4
Manitoba	3.6	2.4	2.8	0.8
Saskatchewan	3.1	0.8	0.7	0.2
Alberta	10.4	8.5	9.3	0.9
British Columbia	13.0	18.1	16.0	1.2
Yukon Territory	0.1	0.0	0.0	0.4
Northwest Territories	0.1	0.0	0.1	0.4
Nunavut	0.1	0.0	0.0	0.1

... not applicable

1. "Immigrant population", also known as "foreign-born population", is defined in the 2006 Census as persons who are, or have been, landed immigrants in Canada.

2. "Recent immigrants" refer to immigrants who came to Canada between January 1, 2001 and May 16, 2006.

3. This ratio shows whether the share of recent immigrants in a given location is higher than the share of the total population in the same location.

For example, if 5% of recent immigrants live in a place and the same percentage (5%) of the total population also lives there, then the ratio will be 1.0.

Source: Statistics Canada, Census of Population, 2006.

Vast majority of immigrants chose city life

Unlike immigrants who arrived years ago in search of good farmland to till, today's immigrants are mostly urban dwellers. In fact, they are much more likely to live in a metropolitan area than the Canadian-born population.

In 2006, 94.9% of Canada's foreign-born population and 97.2% of recent immigrants lived in either a census metropolitan area or a census agglomeration, i.e., urban community. This compares with 77.5% of the Canadian-born population.

Canada's three largest CMAs — Toronto, Montréal and Vancouver — were home to 3,891,800 foreign-born people in 2006, or 62.9% of Canada's total foreign-born population. In contrast, these three urban areas were home to slightly more than one-quarter (27.1%) of the Canadian-born population.

Toronto and Vancouver led major cities in Australia and the United States in terms of the proportion of their population born outside the country. Toronto's and Vancouver's closest

competitors were Miami (36.5% of the city's population was foreign-born) and Los Angeles (34.7%).

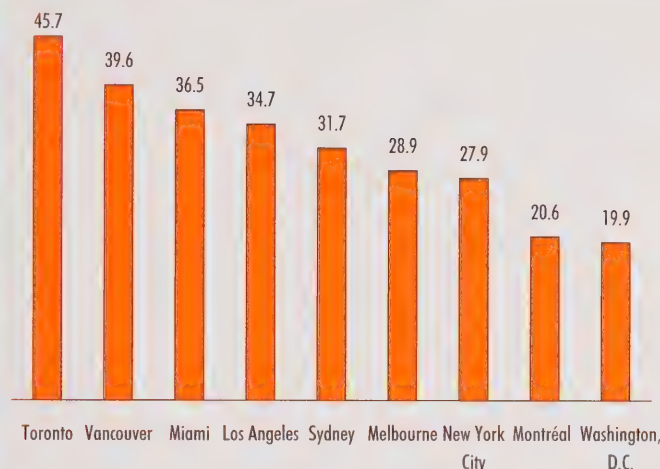
Three largest centres attracted 7 out of every 10 newcomers

Toronto, Montréal and Vancouver attracted 68.9% (765,000) of the new immigrants who came between 2001 and 2006. Another 28.3% spread across the remaining urban areas, while only 2.8% chose to live in a rural area.

Toronto's share of the total recent immigrants was about 40.4%, a decline from 43.1% in 2001; Vancouver's share decreased from 17.6% to 13.7%; while Montréal rose from third to second most popular destination, attracting 14.9% of recent immigrants in 2006, compared with 11.9% in 2001.

The reasons newcomers choose to settle in Canada's three largest CMAs vary, according to the Longitudinal Survey of Immigrants to Canada, but the most common reason was to join the social support networks of family and friends. Other reasons included job prospects (Toronto), language (Montreal), and climate (Vancouver).

Percentage of foreign born in the total metropolitan population, 2006



Note: United States data is for 2005.

Sources: Statistics Canada, 2006 Census; Australian Bureau of Statistics, 2006 Census; U.S. Census Bureau, 2005 American Community Survey.

As the proportion of new immigrants who have settled in Toronto and Vancouver has declined over time, an increasing share of newcomers chooses to live in other CMAs.

Calgary ranked fourth in 2006 in its share of recent immigrants. About 57,900 newcomers, or 5.2% of individuals who arrived in Canada in the last five years, settled in Calgary, an increase from 3.8% in 2001.

Gains were also recorded in Edmonton, which received 2.9% of all newcomers between 2001 and 2006, Winnipeg (2.2%) and London (1.2%).

Hamilton's share of newcomers remained unchanged at 1.9%, while Ottawa – Gatineau showed a slight decline to 3.2%.

Newcomers in suburbs

The impact of immigration on the three largest CMAs varied because the newcomers were more likely to live in certain municipalities within these metropolitan areas.

In Toronto, newcomers to Canada were largely responsible for the growth in the municipalities surrounding the City of Toronto. For example, Mississauga took in 16.7% of newcomers to the Toronto CMA, Brampton 9.6% and Vaughan 2.5%.

In Vancouver, 46% of the CMA's recent immigrants lived in the three municipalities of Richmond, Burnaby and Surrey. Only 28.7% of newcomers lived in the central municipality of the City of Vancouver.

In Montréal, 76.3% of the newcomers lived in the City of Montréal. But there was an increase in the number of newcomers settling in surrounding municipalities such as Laval, Longueuil, Brossard, Dollard-des-Ormeaux and Côte-Saint-Luc. Collectively, these surrounding municipalities received 15% of newcomers in 2006, compared with 11.2% in 2001.

Most immigrants held Canadian citizenship

To be eligible for Canadian citizenship, immigrants must meet several requirements, including at least three years of residency in Canada and knowledge of an official language. They may also be required to take a knowledge test.

In 2006, 85.1% of eligible foreign-born people were Canadian citizens, a slight increase from 83.9% in 2001.

Those who had been in Canada the longest were the most likely to hold Canadian citizenship. The vast majority of those who arrived before 1961 (94.1%) or in the 1960s and 1970s (89.1%) had become naturalized citizens. The proportion of naturalized citizens was lower (84.1%) among those who arrived in the 1990s.

Since 1977, immigrants who obtain Canadian citizenship also have the right to retain their previous citizenship. However, in 2006, just 2.8% of the population, about 863,100 people, reported having Canadian citizenship in addition to other citizenship.

Most (80.2%) of those who had multiple citizenship were foreign-born people, with the largest proportion reporting citizenship of the United Kingdom (14.7%), Poland (6.6%) and the United States of America (5.4%).

Portraits of major metropolitan centres

Settlement patterns show that immigrants choose to live in major urban centres to take advantage of the established immigrant communities, economic opportunities and social ties. As a result, recent immigrants have contributed to the changing portraits of urban communities.

Halifax: Largest foreign-born population in Atlantic provinces

Halifax was home to the largest foreign-born population in the Atlantic provinces. The 2006 Census counted 27,400 foreign-born people living in the census metropolitan area of Halifax, and they represented 60.7% of all Nova Scotians born outside Canada.

Halifax received 5,100 new immigrants, or 0.5% of all newcomers to Canada in 2006, who made up 18.4% of the foreign-born population in the CMA. Slightly more than half (51.4%) were born in Asia and the Middle East.

Montréal: The third-largest foreign-born population

Montréal was home to the third-largest foreign-born population in Canada, having 740,400 foreign-born residents who accounted for 12% of the country's total foreign-born population.

Of the 1.1 million recent immigrants to Canada, 14.9% chose to settle in Montréal. In fact, Montréal's share of recent immigration to Canada is greater than its share of Canada's total population (11.5%).

About two-thirds (64.6%) of newcomers were aged 25 to 54, compared with 43.3% of its Canadian-born residents. Recent immigrants made up 6.5% of the working-age population in Montréal.

New immigrants who settle in the Montréal CMA come from every part of the world, especially francophone countries. Asia, including the Middle East, was the leading source of recent immigrants, as 31% of the new immigrants living in Montréal were from that part of the world.

Montréal CMA was home to 60% of all newcomers to Canada who reported French as their only mother tongue. Moreover, six of the 10 leading birthplaces of new immigrants to Montréal are countries where French is spoken: Algeria (8.7%), Morocco (7.6%), Romania (7.2%), France (6.3%), Haiti (5.2%) and Lebanon (3.2%).

More African-born recent immigrants settled in Montréal than in other CMAs, at 37% compared with 22.1% in Toronto and 4.1% in Vancouver. African immigrants made up 26% of Montréal's newcomers, which made Africa the second-largest source of recent immigration to Montréal.

There are still European immigrants in Montréal, representing 22.5% of Montréal's total recent immigrant

population in 2006. France was still a major country of birth among immigrants to Montréal (more than 10,400 newcomers) although increasing numbers of recent immigrants are from East European countries such as Romania (12,000) and Bulgaria (2,900).

In 2006, one in five newcomers were born in the Americas, most from Haiti, Colombia, Mexico and the United States.

In 2006, 76.3%, or 126,200 individuals, of recent immigrants to the CMA of Montréal were living in the City of Montréal.

While 75.2% of the recent immigrants had a mother tongue other than English or French, 94.4% reported that they were able to carry on a conversation in English or French.

Ottawa - Gatineau: Fifth-largest proportion of foreign-born

The 2006 Census enumerated 202,700 foreign-born people in the census metropolitan area (CMA) of Ottawa - Gatineau, an increase from 185,100 in 2001 and a growth rate of 9.5%.

Since 2001, 35,100 recent immigrants had arrived in Ottawa-Gatineau, representing 3.1% of the total population in the CMA. The Quebec part of the CMA (Gatineau) received 15.2% (representing 5,300 individuals) of new immigrants who came within the last five years. Conversely, on the Ontario side of the CMA (Ottawa), the share of new immigrants dropped from 90.1% of all newcomers in 2001 to 84.8% in 2006.

Ottawa - Gatineau ranked fifth in having the largest proportion of foreign-born people (3.3%) and new immigrants (3.2%) in 2006. The People's Republic of China (12.7%), India (4.6%) and the United States (4.3%) were the top three countries of birth among the new immigrants in Ottawa - Gatineau.

Toronto: Canada's major immigrant gateway

The census metropolitan area (CMA) of Toronto is still the major gateway for immigrants in Canada. The census enumerated 2,320,200 foreign-born people in Toronto in 2006, the largest number of any metropolitan area in the nation.

The foreign-born population accounted for 45.7% of the CMA's total population of 5,072,100, up from 43.7% in 2001. Between 2001 and 2006, the foreign-born population grew by 14.1%, compared to 4.6% for the Canadian-born population.

More foreign-born people settled in the Toronto CMA between 2001 and 2006 than in any other metropolitan area.

An estimated 447,900, or 40.4% of foreign-born people who arrived in Canada between 2001 and 2006, chose Toronto. These new immigrants made up 8.8% of Toronto's total population in 2006.

The top two source countries for recent immigrants to Toronto were Asian, with India surpassing the People's Republic of China as the number one source country.

The new arrivals had a major impact on the metropolitan area's workforce. Over one-half (56.6%) were in their prime working years, aged 25 to 54, and they made up 10.8% of CMA residents in this age group.

Of school-aged children between ages 5 and 16, recent immigrants made up 10.5%. Among these school-aged children, 54.9% reported speaking a non-official language most often at home.

The City of Toronto was home to the largest number of foreign-born people in 2006. However, most of the growth in the foreign-born population occurred in the municipalities surrounding the city.

For example, Brampton's foreign-born population increased by 59.5% from 2001 to 2006, and Markham's by 34.1%. Ajax, Aurora and Vaughan also saw increases of more than 40% in the foreign-born population.

More than 1 million foreign-born in the city of Toronto

An estimated 267,900 recent immigrants settled in the City of Toronto, accounting for 21.6% of the total foreign-born population living in the city in 2006.

More than two-thirds (68.5%) of newcomers were born in Asian countries, with the top five source countries being the People's Republic of China, India, the Philippines, Pakistan and Sri Lanka.

Chinese, including the different dialects, such as Mandarin and Cantonese, was reported by 17.3% of newcomers as the language most often spoken at home. Another 4.8% of newcomers spoke Urdu most often at home.

Among the newcomers in the City of Toronto, about 1 in 10 reported that they did not have knowledge of either English or French.

In 2006, 56.5% of the population in Markham was foreign-born. A total of 18,900 newcomers chose to live in Markham, and represented 7.2% residents of the 2006 population. The

vast majority (84.3%) of newcomers were born in Asia and the Middle East. Fully 8% of school-aged children 5 to 16 years in Markham were recent immigrants to Canada. About one-quarter of them reported Chinese as the language spoken most often at home.

In Mississauga, the proportion of the foreign-born population increased from 46.8% in 2001 to 51.6% in 2006. The top five countries of birth of recent immigrants there were India, Pakistan, the Philippines, the People's Republic of China and South Korea. This pattern of migration is reflected in the diversity of the communities in Mississauga.

Between 2001 and 2006, a total of 42,900 immigrants settled in Brampton, making the municipality home to 9.6% of all newcomers to the Toronto metropolitan area. Two-thirds of all recent immigrants there came from just three countries: India, Pakistan and the Philippines. Jamaica and Nigeria were also among the top source countries for newcomers to Brampton. About 3 in 10 said that they spoke Punjabi most often at home. The use of Punjabi reflects the high number of recent immigrants from India and Pakistan who settled in Brampton.

Hamilton: Almost one in four foreign-born

Following Toronto and Vancouver CMAs, Hamilton's foreign-born population of 24.4% was the third highest in 2006 in Canada. This was up from 23.6% in 2001.

Between 2001 and 2006, the foreign-born population increased by 7.7%, while the total population of the Hamilton CMA grew by 4.3%.

The share of Canada's recent immigrants who settled in Hamilton has remained unchanged since 2001 at 1.9%. Hamilton was home to 20,800 immigrants who arrived in Canada between 2001 and 2006. One-half of them were born in Asia and the Middle East, while 23% were from Europe.

Winnipeg: Philippines the number one source country of recent immigrants

The foreign-born population in Winnipeg grew by 10.5% between 2001 and 2006. As of 2006, the foreign-born population numbered 121,300, or 17.7% of the total population for the CMA.

About 1 in 5 foreign-born residents of Winnipeg were recent immigrants, predominantly born in Asia and the Middle East. The Philippines was the leading source country,

CST Census snapshot – Immigration in Canada: A portrait of the foreign-born population, 2006 Census – continued

with nearly 3 out of every 10 newcomers, while India and the People's Republic of China were also among the leading source countries of recent immigrants.

Edmonton: Attracted a larger share of newcomers in 2006

The foreign-born population in Edmonton grew by 14.9% between 2001 and 2006, outpacing the total growth of the CMA (10.6%) and the national growth rate of the foreign-born population (13.6%).

In total, the 2006 Census enumerated 31,900 newcomers, with almost all (92.6%) residing in the City of Edmonton. Almost two-thirds (62.1%) of recent immigrants were born in Asia and the Middle East. The Philippines (13.4% of newcomers), India (13%) and the People's Republic of China (12.2%) were the leading source countries.

Calgary: Foreign-born population growing faster than the Canadian-born population

Calgary has experienced high population growth in the last several years, and in 2006, there were an estimated 252,800 foreign-born residents in the CMA. With an increase of 28% between 2001 and 2006, growth in Calgary's foreign-born population was one of the fastest in the country.

An estimated 57,900 recent immigrants settled in Calgary, making up 5.4% of the city's total population in 2006. They had a significant impact on the local workforce, accounting for nearly two-thirds of the growth in the working-aged population (25 to 54 years old). Meanwhile, recent immigrant children made up 7.2% of all school-aged children in the CMA.

Recent immigrants living in Calgary came from all around the world, but the People's Republic of China, India and the Philippines were the top three source countries of recent immigrants. About two-thirds (63.5%) of newcomers spoke a non-official language most often at home.

Vancouver: Canada's immigrant gateway in the West

The population of foreign-born people in the CMA of Vancouver increased five times faster than its Canadian-born population between 2001 and 2006, at 12.6% and 2.3%, respectively.

The Census counted 831,300 foreign-born people in the Vancouver CMA, up about 92,700 from 2001. These residents accounted for 39.6% of the CMA's total population.

However, the number of recent immigrants who chose to settle in the census metropolitan area (CMA) of Vancouver has declined for two consecutive censuses, unlike Toronto and Montréal, which both recorded increases. The main factor in the decline was a slowdown in immigration from the Hong Kong Special Administrative Region, which had been the source of many newcomers in the late 1980s and early 1990s.

Most of the 151,700 immigrants who arrived in Vancouver during the past five years were born in Asia and the Middle East. Over one-quarter (26.2%) came from the People's Republic of China, and 12.4% from India, 10.9% from the Philippines, 7.7% from South Korea and 4.6% from Taiwan.

A high proportion of recent arrivals (57.2%) were in their prime working years, aged 25 to 54, and made up 8.9% of Vancouver's prime working-age population. In addition, about 27,600 children aged 5 to 16 were new to Canada. These young recent immigrants represented 9.3% of Vancouver's school-aged population.

City of Vancouver received the highest number of newcomers

Being the biggest municipality in the CMA of Vancouver, the City of Vancouver had the biggest population of both longer-term and recently arrived foreign-born people of all the municipalities in the metropolitan area.

The foreign-born accounted for 45.6%, or 260,800 persons, of the city's total population. About 7.6% of this population was made up of newcomers to Canada.

Between 2001 and 2006, the City of Vancouver's foreign-born population grew by 5.3%. People born in the People's Republic of China made up 36.1% of recent immigrants. The other leading source countries were the Philippines (12.2%), India (4.8%), Taiwan (4.2%) and South Korea (4%).

In the municipality of Richmond, foreign-born people outnumbered the Canadian-born, accounting for 57.4% of residents. In fact, Richmond had the highest proportion of foreign-born of all Canada's municipalities.

About 1 in 10 (10.8%) of Richmond's population were newcomers who had arrived in Canada within the last five years. Among these 18,800 recent immigrants, fully one-half were born in the People's Republic of China. Other prominent

source countries were the Philippines (14.2%), Taiwan (7.4%), the Hong Kong Special Administration Area (4.7%) and India (4.3%). Chinese dialects such as Mandarin and Cantonese were the languages spoken most often at home by the largest share of recent immigrants living in Richmond.

The immigration trend in the municipality of Burnaby was similar to that of its neighbour, Richmond. The 2006 Census counted 102,000 foreign-born residents in Burnaby, who accounted for 50.8% of its population.

About 1 in 10 (10.8%) of Burnaby's residents were newcomers who had arrived in Canada between 2001 and 2006. Collectively, 64.4% of all newcomers to Burnaby came

from the People's Republic of China, South Korea, the Philippines, Taiwan and India.

In Surrey, 38.3% of the total population of 392,500 was foreign-born. Although this proportion was the lowest of the four big municipalities in the Vancouver CMA, Surrey actually recorded the highest growth rate for the foreign-born population, at 30.9%.

Overall, recent immigrants made up 7.4% of Surrey's total population. India was the top source country (41.9% of all foreign-born newcomers). Another 33.9% of recent immigrants came from the Philippines, South Korea, the People's Republic of China, Pakistan and Fiji.

Kids' sports

by Warren Clark

Sport touches many aspects of Canadians' lives—their health and well-being, their social networks, their sense of social connectedness. Organized sport can help children grow, giving them a sense of achievement while building teamwork, leadership, problem-solving, decision-making, and communications skills. Sport also enables children to channel their energy, competitiveness and aggression in socially beneficial ways.¹ Improving health through sport and other forms of physical activity may reduce future health-care costs and build lasting habits of physical fitness while combating the growing problem of childhood obesity.^{2,3,4}

Most children are first introduced to sports through the family, which has an important influence on children as they develop their identity and build self-esteem. Many studies have identified the influence that parents have on their children's sports involvement by investing time, emotional support and financial resources.⁵

This article will examine trends in regular organized sports participation of children aged 5 to 14, using data from the General Social Surveys (GSS) of 1992 and 2005. It will also look at the factors that influence children's participation in sports including parental involvement in sports, socio-demographic characteristics of the family, and geography. Other physical activities (such as walking, jogging, dancing) may also contribute to the health and well-being of children, but these remain beyond the scope of this article. Only those activities

that are considered organized sports are discussed here (see "What you should know about this study" for a definition of the sports included in this article).

Sports participation is declining

In 2005, 51% of children aged 5 to 14 (2.0 million children⁶) regularly took part in sports during the previous 12 months. About 51% of these active children participated in more than one sport and were involved in sports activities on average about 2.6 times per week per sport during their sport's season.

Whereas boys' participation in organized sports has declined in all age groups, girls' participation trends depends on their age (Chart 1). In 2005, 5- to 10-year-old girls played organized sports at about the same rate as in 1992. In 2005, older girls aged 11 to 14 were less likely to play sports than they did in 1992, but the decline was less sharp than for boys the same age.⁷

According to the 2005 GSS, boys aged 5 to 14 are still more likely to participate in sports than girls the same age, but the gap is narrowing. Sports participation of boys has declined from 66% in 1992 to 56% in 2005. Over the same time period, sports participation of girls has changed little from 49% to 45%.

Not only are boys now less likely to regularly participate in sports than they were back in 1992, those who do compete are involved in fewer sports—an average of 1.8 sports versus 1.9. In contrast, girls who participate played the same average number of sports in 2005 as they

did in 1992, at 1.7. However, the frequency of sports participation is similar for boys and girls, at 2.5 times per week for boys compared with 2.7 times per week for girls.

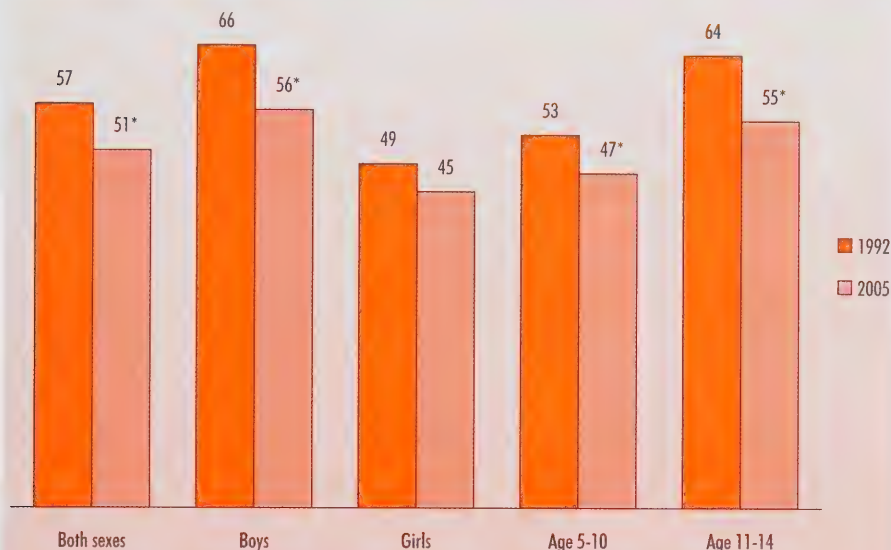
Household income and education of parents influence sports participation

In 2005, 51% of two-parent households with children spent money on sports and athletic equipment. Those who made such expenditures spent an average of \$579 during the year.⁸ In addition to these equipment expenses, families may also spend money on facility rentals, transportation to sports events, club memberships and competition entry fees in order to support their children's participation in sports.

In light of such costs, it is not surprising that sports participation is most prevalent among children from high-income households (highest adjusted income quintile) at 68%, and lowest among children from lower income households (lowest quintile), at 44% (Chart 2).⁹ (See "What you should know about this study" for an explanation of adjusted household income quintiles). Interestingly, the participation gap between boys and girls narrows as household income rises, suggesting that girls from lower income families are particularly disadvantaged when it comes to involvement in sports.

Parental education levels are closely linked to household income. Children who have a parent with a graduate or first professional university degree were more likely to play sports (60%) than children

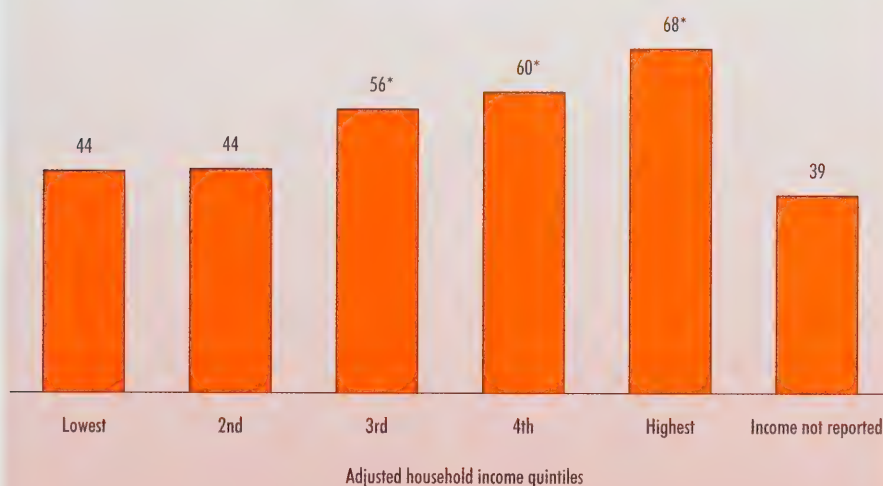
% who regularly participate in organized sports



* Sports participation rate is significantly different from rate for 1992 ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 1992 and 2005.

% who regularly participate in organized sports



Note: For definition of adjusted household income see "What you should know about this study."

* Sports participation rate is significantly different from rate for the lowest quintile ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 2005.

whose parents have a high school diploma (42%). Children of parents who have not graduated from high school are even less likely to be sports participants (22%). The relationship between parental level of education and sports participation of their children is linked to household income, as the children of university-educated parents are more likely to be in high-income households.

Sporty parents have sporty kids

Parents are often involved in their children's sports, whether it is on the sidelines shouting encouragement or being more formally involved as a coach, referee, organizer or fundraiser for a team, league or sports club. They also financially support their children's sports activities.

On an average day, about 7% of parents of 5 to 14-year-olds are involved in some form of sports activity with their children, whether it be participating in sports, coaching or attending a professional or amateur sporting event as a spectator. They spent an average of 2.5 hours doing these sports-related activities with their children.

Parents themselves are involved in many sports-related activities. In total, 57% of parents are involved in some way with sports as participants, spectators, coaches, referees, sports administrators, organizers or members of sports organizations. The remaining 43% are not involved in sports in any way.

According to the 2005 GSS, nearly half of parents (46%) watch amateur sporting events. They are often spectators of their own children's games. In this role, they are taking the time to encourage and be involved with their child's sports, even if it is just watching from the sidelines and driving them to and from the event.

About one-quarter (26%) of parents regularly played sports themselves. Organized sports participation declines quickly after adults reach their early 20s (Chart 3); in fact, in 2005, 34% of fathers and 20% of mothers played sports. Some parents

were involved as coaches (8%), referees (2%) or sports administrators (11%), but fathers were twice as likely as mothers to be in these roles, at 20% versus 11%.

The level of parental involvement in sports has an impact on children's sports participation. In 2005, 24% of children participated in sports if their parents were not involved in sports in any way. It makes a big difference if parents are involved, even just as spectators of amateur sports: children's participation rates more than doubled (62%). This finding shows that parents can support their children's sports activity simply by watching and encouraging them.

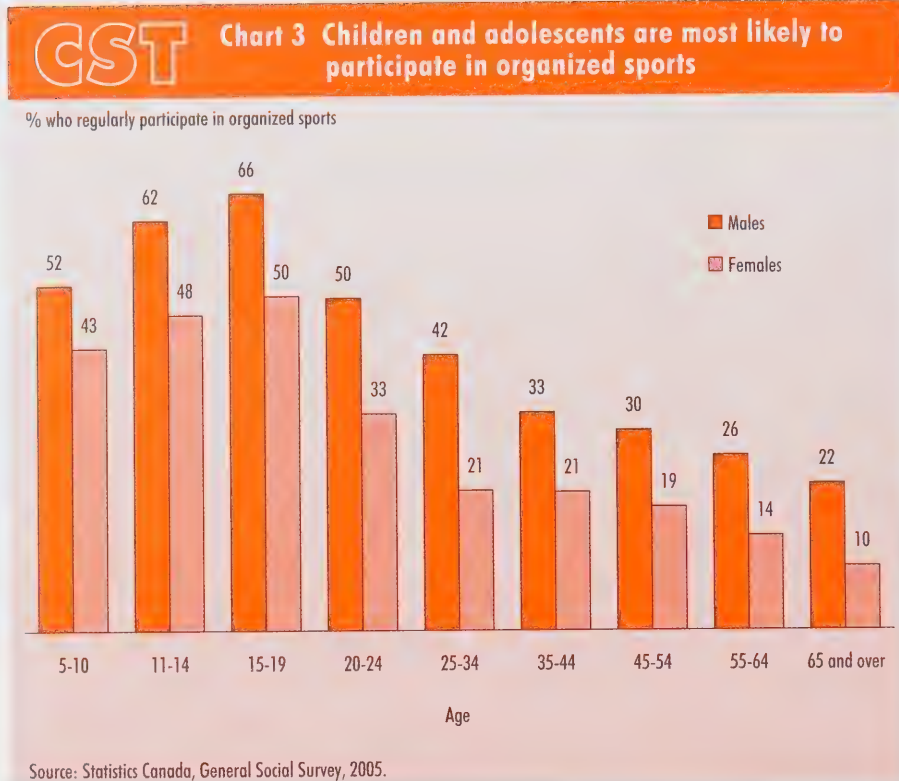
Of those parents who play sports themselves, about half also watch amateur sports. Over two-thirds of children (69%) of these parents¹⁰ also play sports. Sports participation is highest among children whose parents are involved in refereeing, coaching or in sports administration (82%).

Family structure can affect participation

Family structure can also influence the sports participation of children, especially if there are two parents who can share the responsibility of facilitating their children's sports participation.¹¹ The highest children's sport participation rates (53%) occur in intact families where both birth parents are present.

However, children are more likely now than in the past to experience living in a lone-parent, step or blended family. A key finding of the GSS results is that boys' sports participation was almost the same for all family types (ranging from 54% to 58%).

In contrast, girls in lone-parent families (39%) are less likely to be sports participants than girls from intact families (48%). Lone-parent families, especially those headed by women, are more likely to experience financial difficulties. Under the strain of financial problems, lone parents may sacrifice the sports participation



of their daughters, reasoning that sports have traditionally not been as important to young girls' identities as they are to young boys'.¹²

In two-parent families, children's sports participation is highest (75%) if both parents are involved in sports as sport participants themselves, as coaches, referees, sports administrators, as amateur sport spectators or as members of sports clubs or organizations. When only one of the parents is involved in sports, children's sports participation is lower (49%). Although fathers have traditionally been more likely to be involved in sports than mothers, children's participation tends to be about the same whether the father or mother is involved (50% if only the father, 48% if only the mother). If neither parent is involved, only 22% of children take part in sports.

In lone-parent families, parents are less likely to be involved in sports than parents in two-parent families, at 50% versus 59% respectively. If the lone parent is involved in sports, 69% of their children participate in

sports compared with 27% if the lone parent is not involved in sports. These results reinforce research that shows the importance of the family in introducing children to sports early in life.¹³

Children whose mothers are under age 30 are also less likely to participate in sports than children with mothers in their 40s. This likely reflects lower levels of educational attainment and lower household incomes among younger mothers—two factors associated with the sports participation of children.

Parents' workforce status affects children's participation

Among two-parent families, children's sports participation is highest where the mother works part-time and the father works full-time (66%); it is slightly lower when both parents work full-time (58%), and lowest when the mother is not working (38%).

This finding reinforces the argument that children's sports participation entails the use of many family resources, including both

• No time for sports

Although money and access to sports facilities are positive factors associated with sports participation, parental apathy may be the biggest stumbling block. Parents who did not play sports themselves were asked about their reasons for not participating. Half said they have no time for sports, and one-quarter said that they have no interest in sports. Few cited a lack of sports facilities or money. We might expect that those who had no money to play sports themselves would also be limited in the way they could financially support their children's sports. Unfortunately, the small number of parents who reported this reason did not allow us to determine the impact of this upon their children's sports participation due to a small sample size. Not surprisingly, the children of parents with no interest in sports had lower rates of sports participation than those whose parents cited other reasons for not participating.

• I'm keen about sports

Parents who regularly participate in sports were asked how strongly they felt about five different reasons for their own participation. They were most likely to view

their own participation in sports as "very important" for recreation and relaxation (71%), as a way of maintaining physical health and fitness (67%), and as a family activity (60%). They were less likely to rate achievement and skill development (41%) and developing new friendships (27%) as very important reasons.

The attitudes of fathers play a key role in the likelihood that their children play sports. Fathers who cited at least four out of the five reasons as "very important" exhibited a very positive attitude towards sports participation. This outlook is associated with significantly higher sports participation for their children (77%) compared with children whose fathers reported zero or one reason as very important for their own sports participation (54%). In contrast with fathers' attitudes, the level of importance mothers placed on their own sports participation made little difference to that of their children. Still, there is a significant difference when mothers participated in sports in any way: their children's participation rate was much higher (71%) than that of children whose mothers did not (29%).

money and time. Families where both parents are working full-time are more likely to be in the top household adjusted income quintile, but they may have less time to support their children's sports participation. In fact, in families where both parents work full-time, 58% of mothers and 61% of fathers are involved in sports in some way compared with 61% of mothers and 76% of fathers in families where the mother works part-time (Chart 4).

In families where the mother is not employed and the father works full-time, income may become a limiting factor in children's sports participation as families are more likely to be in the lowest income quintiles. In these families, 44% of mothers are involved in sports in some way as are 59% of fathers.

Children of recent immigrants are less likely to participate

Data from the 2006 Census show that the percentage of Canada's population that is foreign-born has reached its highest level in 75 years (20%).¹⁴ In 2006, as it was in 2001, nearly 6 in 10 of recent immigrants were born in Asia (including the Middle East). One of the problems that recent immigrants face is achieving economic stability in their new country. As participation in sports often requires economic resources, children of recent immigrants may face financial barriers to sports participation.

According to the 2005 GSS, children of recent immigrants (immigrants who had been in Canada for less than 10 years) are less likely to participate in sports (32%) than children of Canadian-born parents (55%). While internationally popular

sports such as soccer may provide the children of recent immigrants with a familiar place to integrate into Canadian society, even in soccer, participation is lower (10%) than among those whose parents are Canadian-born (23%).

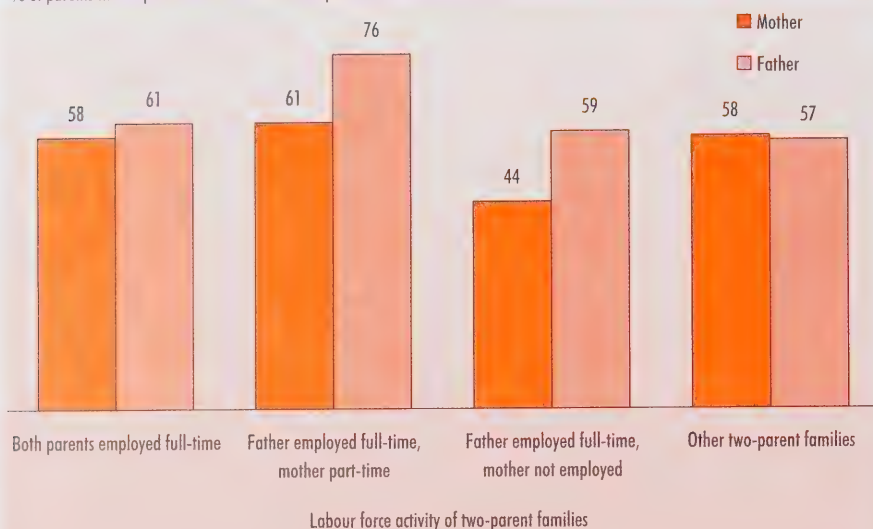
Place of residence influences sports participation

In 2005, the sports participation of children aged 5 to 14 was highest in Atlantic Canada and lowest in British Columbia and Quebec. It was also low (47%) in Canada's three largest cities (Toronto, Montréal and Vancouver) and highest in smaller cities and towns with a population between 10,000 and 50,000 (58%).

Rural Canada had lower levels of sports participation (49%), similar to that of mid-sized census metropolitan areas (51%). This result may be because sports activity in

Chart 4 Parents are most likely to be involved in sports if the father is employed full-time and the mother is employed part-time

% of parents in two-parent families involved in sports



Note: Sports involvement includes playing sports, coaching, refereeing, sports club or league membership, sports administration, watching amateur sports.

Source: Statistics Canada, General Social Survey, 2005.

Studies have shown that children are likely to participate in sports if they live in neighbourhoods that are considered safe for outside play.^{15,16} Neighbourhood disorder is more likely to occur in places that have higher levels of low income,¹⁷ thereby limiting sports participation among children.

The 2005 GSS supports those earlier studies and shows that sports participation is lowest among children in high-density areas (42%) where low-income families are more likely to be found,¹⁸ and highest in low-density suburban areas (52%) of large and mid-sized metropolitan areas.¹⁹

Soccer is Number One with kids

Look at the popularity of the FIFA Under-20 World Cup, a premier world event for soccer held in Canada during the summer of 2007! It's another sign that soccer has become the most common sport for both boys and girls. Once seen as a European or South American sport, soccer has caught on among Canadian youth, with nearly 20% of young people playing the game. In contrast, other sports have seen declining child participation, particularly baseball, swimming, downhill skiing²⁰, volleyball, gymnastics and figure skating (Table 1).

Participation rates of boys and girls have somewhat different trends in individual sports. Girls are diversifying their participation into sports once thought of as boys' sports, such as hockey and soccer; at the same time, their involvement has declined in traditional girls' sports such as swimming and figure-skating. Soccer is the only sport where boys' participation has increased significantly, while hockey – formerly the number one organized sport for boys – has seen a dip in participation, especially among boys from households in the lowest adjusted income quintile.

Table 1 Top 10 organized sports of 5- to 14-year-olds in 2005

	% of 5- to 14-year-olds regularly participating in organized sports	
	1992	2005
All sports	57	51*
Soccer	12	20*
Swimming	17	12*
Hockey	12	11
Basketball	6	8
Baseball	13	5*
Volleyball	5	3*
Gymnastics	4	2
Karate	2 ^E	2
Skiing, downhill	6	2*
Track and Field – Athletics	2 ^E	2 ^E

^E use with caution

* Statistically significant difference from 1992 ($p < 0.05$).

Source: Statistics Canada, General Social Survey, 1992 and 2005.

rural settings often involves longer distances, which may limit the opportunities to participate for rural children.

The physical environment can promote sports participation by providing clean and safe places for people to practice and compete.

Summary

Children's participation in sport is influenced by gender, age, household

Data for this article is taken from the 1992 and 2005 General Social Survey (GSS) which asked respondents aged 15 and over living in the ten provinces to identify their own organized sports activities as well as those of other household members. In the 2005 survey, 2,021 respondents identified 3,112 children aged 5 to 14 living in the same household. For most children, the respondent was a parent (88%), a sibling (9%) or a grandparent (2%). Another 1% had other relationships with the child (e.g., aunt/uncle, cousin, nephew/niece or roommate).

Sport is defined as mainly team or organized activity such as hockey, baseball, basketball, golf, competitive swimming and soccer. A number of recreational physical activities were not defined as sports and are excluded: non-competitive aerobics, aqua fit, bicycling for recreation/transportation only, body building/body sculpting, car racing, dancing, fishing, fitness classes, hiking, jogging, lifting weights (non-competitive), motorcycling, snowmobiling, and non-competitive walking. Although dance can be an intense and highly competitive physical activity and is most popular among girls, it was not identified as a sport by the 2005 GSS.

In the 1992 GSS, cheerleading and skateboarding were also excluded from the definition of sport, but were included in sports in 2005. The inclusion of cheerleading and skateboarding in 2005 increased the overall sports participation rate for children aged 5 to 14 by less than one percentage point (rising to 49.8% versus 49.1% with the two sports excluded).

Sports participation refers to sports that one regularly participated in (at least once a week) during the previous 12 months. Children's sports participation is identified by the respondent, who was asked to report on the sports activities of no more than four other household members.

This limitation may result in the underestimation of sports participation of children in large families; in 2005, however, only 0.3% children aged 5 to 14 may have been affected.

Adjusted household income quintiles

The composition and size of a household can affect its financial well-being. To compensate for these factors, household income is adjusted as follows: the oldest person in the household receives a factor of 1.0; the second oldest person in the household receives a factor of 0.4; all other household members aged 16 and over each receive a factor of 0.4; and all other household members under age 16 receive a factor of 0.3.

Quintiles are a convenient way of categorizing income from lowest income to highest income in order to draw conclusions about the sports participation of children from the bottom, top or middle part of the household income distribution. Adjusted household incomes of respondents are ranked from lowest to highest and then are traditionally divided into five groups of equal numbers of units, called quintiles. However, because the General Social Survey classifies household income into income ranges, it is only possible to divide the groups into approximately equal sizes for those reporting household income.

The first quintile (lowest) represents the households with approximately the lowest 20% of reported adjusted household income. The "2nd", "3rd –middle" and "4th" quintiles represent progressively higher levels of adjusted household income; the 5th or highest quintile represents those households from about the top 20% of adjusted household income. The GSS also has a substantial number of respondents who did not report their household income; these are shown as a separate group.

income, parental education, parental involvement in sports activities, geographic location and immigrant status of parents.

Boys are more likely than girls to be sports participants, but this gender gap is narrowing. Those in their early teens are more likely to be in sports than younger children. Children from households with high incomes and those with highly-

educated parents are much more likely to be sports participants than those from low-income families or those whose parents have a high school diploma or less.

Parents who are involved in sports activities themselves boost the sports participation rates of their children, even if they are only spectators of amateur sport. In two-parent families, children's sports participation rates

are highest if both parents are involved in sports activities.

Children living in smaller towns and cities (population of 10,000 to 49,999) are the most likely to be sports participants, while those living in Canada's three largest cities are the least likely. Children of recent immigrants are least likely to be sports participants.

Other factors such as the quality of school sports programs and facilities, the safety of neighbourhoods, and the influence of peers may also influence children's sports participation, but these factors were not examined in the 2005 General Social Survey.

GST

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7. Five- to ten-year-old boys' sports participation rate dropped from 60% in 1992 to 52% in 2005, whereas girls of the same age remained relatively stable (at 45% in 1992 and 43% in 2005—a difference that is not statistically significant). Among 11- to 14-year-olds, boys' participation dropped from 74% to 62% while girls' dropped from 54% to 48%.
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19. Large and mid-sized CMAs include those with a population of over 250,000 in 2001 which are: Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Quebec City, Winnipeg, Hamilton, Windsor, London, St. Catharines, Victoria, Oshawa and Kitchener.
20. The drop in participation in downhill skiing may be partially related to the availability of snow during the winter. During January-March 2005 and December 2005, the prime skiing season for many Canadians, there was less snow than during winters in the 1990s.

	Gender of child aged 5 to 14				Gender of child aged 5 to 14		
	Both sexes	Boys	Girls		Both sexes	Boys	Girls
	(% of children aged 5 to 14 who regularly participated in organized sports during the last 12 months)				(% of children aged 5 to 14 who regularly participated in organized sports during the last 12 months)		
All children aged 5 to 14	51	56	45	Highest level of schooling of parents			
Age of child				Some secondary/elementary/ no schooling	22* [‡]	28* [‡]	16* [‡]
5 to 10 †	47	52	43	High school diploma	42*	50	34*
11 to 14	55*	62*	48	Some university/community college	49*	53	45*
Family type				Diploma/certificate from community college or trade/technical	54	59	48*
Intact †	53	58	48	Bachelor's degree	57	66	48
Step or blended	46	54	37*	Doctorate/master's/first professional †	60	62	59
Lone-parent	47	55	39*	Age of mother			
Sports activity level of parents				Less than 30 †	39	42	35
No interest in sports †	24	27	22	Thirties	47*	52*	43*
Spectator only	62*	73*	52*	Forties	57*	64*	48*
Participant only	46*	49*	44*	50 and over	50*	53*	46*
Participant and spectator	69*	77*	63*	Period of immigration of parent			
Administrator/referee/coach	82*	86*	77*	Canadian-born †	55	61	49
Number of parents involved in sports				Before 1986	50	55	46
Two-parent families				1986-1995	35*	33* [‡]	37* [‡]
Neither parent †	22	26	19	After 1995	32*	36* [‡]	28* [‡]
One parent	49*	55*	43*	Not reported	41*	51*	30*
Both parents	75*	81*	70*	Region			
Lone-parent families				Atlantic †	61	67	55
Parent not involved in sports †	27	29	26* [‡]	Québec	48*	57*	38*
Parent involved in sports	69*	82*	53*	Ontario	52*	57*	47
Labour force activity of parents				Prairies	53*	56*	48
Two-parent families				British Columbia	44*	49*	40*
Both parents employed full-time	58	64	52	Population size of Census Metropolitan Area (CMA) or Census Agglomeration (CA)			
Father employed full-time/Mother part-time †	66	69	63	Large CMAs (Toronto, Montreal, Vancouver) †	47	52	41
Father employed full-time/Mother not employed	38*	42*	35*	Mid-size CMAs (250,000+)	51	56	46
Other two-parent families	51*	49*	53	Small CMAs & CAs (50,000-<250,000)	57*	68*	44
Lone-parent families				Small cities and towns 10,000-<50,000	58*	64*	52*
Employed full-time	53	65	40*	Rural	49	55	43
Employed part-time †	57	52* [‡]	61	Relative Housing density of neighbourhood			
Lone parent not employed	40	46	34* [‡]	High †	42	43	41
Adjusted household income quintiles				Medium	45	55	35
Lowest †	44	52	35	Low	52*	58*	47
2nd	44	50	38	Outside major urban centres	54*	59*	48
3rd (middle)	56*	62	50*				
4th	60*	64*	55*				
Highest	68*	75*	61*				
Not reported	39	43	36				

[‡] use with caution

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2005.

City of Québec 1608-2008: 400 years of censuses

by Gwenaël Cartier

This article was adapted from "Québec 1608 à 2008 : 400 ans de statistiques démographiques", which will be published in Les cahiers québécois de démographie in August 2008. <http://www.demo.umontreal.ca/adq/cahiers.html>

The founding of Québec City

On April 13, 1608, Samuel de Champlain embarked on his third voyage to New France. Pierre DuGua de Mons had commissioned him to establish a permanent trading post in the lands explored just less than a century earlier by Jacques Cartier.¹ Champlain landed at Québec on July 3, 1608, with a crew of 28 men. Unaccustomed to the very harsh living conditions, only 8 crew members survived the first winter.

So began the history of Québec City, which is now, 400 years later, the oldest francophone city in North America.

The complete history of Québec City's population in its early years was not reported in any official federal government document until the first census of the new Confederation, held in 1871. A revision of the data was published following the 1931 Census. These two censuses, along with some statistics from others, were used to prepare this portrait of Québec City's development from its birth to its 400th anniversary.

Before the founding of Trois-Rivières in 1634 and Montréal in 1642, the population of Québec City was, for all intents and purposes, the population of New France. Immigration, though responsible for most of the city's early growth, was a minor factor until the city fell



Samuel de Champlain
Source: The Canadian Online Atlas
The Royal Canadian Geographical Society

to the Kirke brothers in 1629. After this event, little is known about Québec City's population until Jean Talon arrived and conducted the first census almost 40 years later.

Jean Talon conducts the first census

Although 36 censuses were conducted while the colony belonged to the French regime, only 15 of them provide statistics specific to Québec City. The practice of census-taking began in New France with the arrival

of its first intendant, Jean Talon,² on September 12, 1665. Along with the rest of 17th century New France, Québec City was one of the first places in North America in which a census was taken,³ and it was held at a time when the young colony was just getting organized. Talon conducted it shortly after his arrival, actually going door-to-door in person to collect the information. There was a great deal of territory to cover, and he did not finish until 1666.

Talon's initial results describe a New France dominated by Québec City and the surrounding area (Chart 1).

The data show a substantial imbalance between the sexes. In a population of 547 persons, there were about 50% more men than women in Québec City, a situation that was similar throughout New France. This finding prompted one of Talon's first recommendations to the King, which was to promote immigration by women.

A breakdown of the data by marital status shows that 46.2% of the colony's inhabitants were unmarried and that almost all (over 90%) of these unmarried settlers were men. In fact, until 1617, there were no women in Québec City, and there was little incentive for them to go there. However, as a result of Talon's work, more than 1,000 women, including

some 900 “King’s Daughters”,⁴ arrived in New France between 1667 and 1673 to help populate the colony.

Talon’s censuses provided a picture of the colony from various perspectives. For example, in 1666, he found that 763 of the 1,378 individuals aged 15 and over were workers employed in 50 different trades and occupations. (Presumably, these figures do not include women and soldiers.)

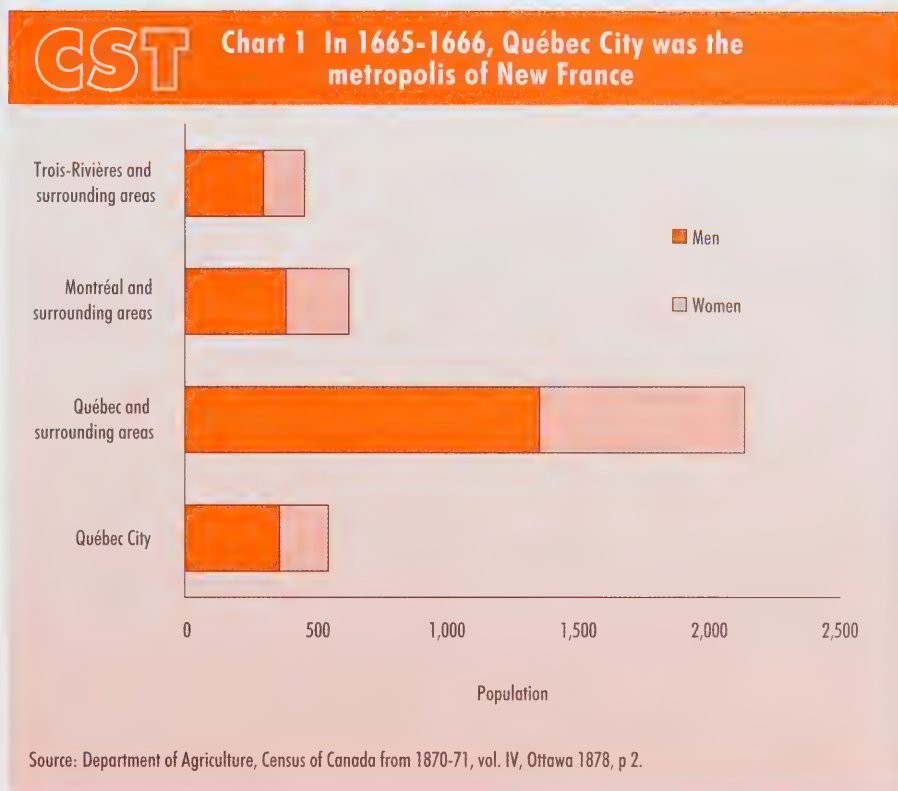
The Census of 1681

Following the censuses taken by Talon in 1666 and 1667, his replacement Jacques Duchesneau⁵ conducted five more between 1675 and 1681. The colony’s population tripled between 1666 and 1681, rising from 3,215 to 9,677. Québec City benefited from this growth, as its population climbed from 547 to 1,345 over the 15-year period. However, it had a slightly slower rate of increase than the rest of the colony as neighbouring areas enjoyed a more rapid growth.

The most obvious impact of Jean Talon’s work on daily life in Québec City must be the reduced demographic imbalance between the sexes. Between 1666 and 1681 the sex ratio fell from three men to one woman among the population



Source: Jean Talon by Théophile Hamel
Museum of Civilization, collection of
Séminaire de Québec
No. 1993.16425



aged 15 and over to less than two to one, as the male share of the city’s population hovered just above 60% (61.2%). Furthermore, the arrival of the King’s Daughters boosted the proportion of the population under age 15 from slightly over 30% to nearly 40%. Consequently, the median age of the population, which was probably about 22.5 years in 1667, also dropped to about 19 years by 1681.

Other censuses of the French regime

Although the French regime conducted 28 more censuses after 1681, none provided as much information as those undertaken by Talon and Duchesneau.

Québec City’s population shrank between 1698 and 1706, probably because the population in the surrounding areas increased. The number of settlements in the colony grew steadily, climbing from about 10 as counted in the first census to nearly 100 at the time of the change to British rule in 1763. In the 1765

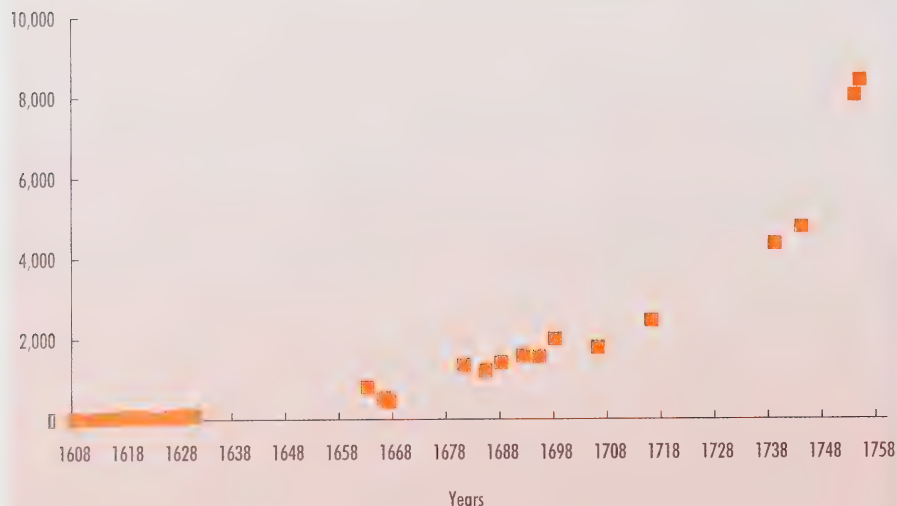
census, people were enumerated in 113 locations. In sum, from the arrival of Samuel de Champlain and his 28 men in 1608, the population of the city of Québec grew to number 8,001 persons at the time of the last census of the French regime, conducted by Intendant François Bigot in 1754 (Chart 2).

Québec City under the British Empire

The frequency of census-taking slowed when New France became part of the British Empire. Only three censuses were held in the second half of the 18th century – in 1765, 1784 and 1790. Instead, the tradition of having regular censuses, started by Jean Talon a century earlier, became more a tradition of having surveys.⁶ These surveys were targeted to settlements or to very specific topics. They were also conducted on an ad hoc basis. For example, in 1763, only families were counted in the survey; the results showed that there were 4,727 families in Québec City and 5,302 in Montréal. In the same

Chart 2 Under the French regime, the population of Quebec experienced rapid growth after 1716

Population



Source: Dominion Bureau of Statistics, from 1608 to 1663. Department of Agriculture, from 1666 to 1754. 1739 and 1755 estimated by Gwenaël Cartier, demographer at Statistics Canada.

way, in 1764, heads of Protestant families were enumerated and found to number 144 in Québec City and 56 in Montréal.

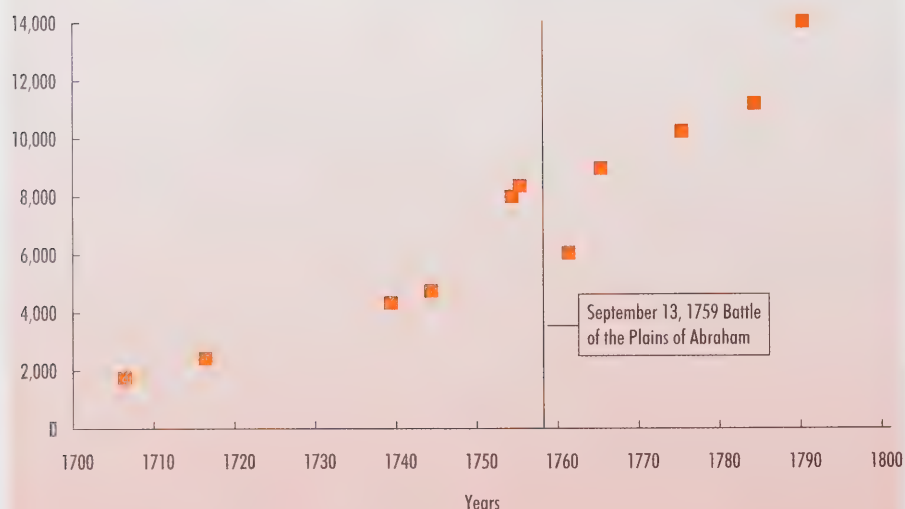
Under the new administration, the post of Intendant was abolished, and its functions were assigned to the governor. Québec City also lost its status as the regional metropolis. By the end of the 18th century, it was smaller than Montréal, which became the new metropolis with a population of 18,000 in 1790. Nevertheless, Québec City, with its 14,000 inhabitants, remained the province's seat of government and its second-largest city. (The 1754 Census was the last to provide complete information about Québec City and Montréal until the census of 1825. The data presented here for the years at the end of the 18th century are estimates.⁷⁾

The population of Québec City fluctuated throughout the 18th century. However, it is apparent that the growth of the city resumed despite the change in governing power (Chart 3).

It is also worth noting some specific points about Québec City's population in the late 18th century. According to the 1784 Census, 88 slaves lived in the region of Québec City. This particular aspect of life in the province was never described in the censuses of New France.⁸

Chart 3 After the Conquest of 1763, population growth in Québec City resumed

Population



Source: Dominion Bureau of Statistics, 1716, 1744. Department of Agriculture, 1706, 1754, 1765 and 1790. Data points for the other years have been estimated by Gwenaël Cartier, demographer at Statistics Canada.

Québec City, capital of Lower Canada

A decree signed by King George III of England (*Constitutional Act of Canada*, June 10, 1791) created the provinces of Upper and Lower Canada and made Québec City the capital of Lower Canada. However, there is no information about Québec City's population until the first census of Lower Canada in 1825.

The first censuses in the 19th century

In 1825, the census tells us that the population of Québec City passed the 20,000 mark, with a total count of 22,101. After this date, population

The vocabulary used by the census to describe particular places or persons has transformed itself over time, leading to possible confusion about the terms. In the case of the word "district," beginning with the British regime, this term designated a large region named after the largest city within its boundaries. All districts together encompassed the entire territory.

The best example to illustrate the representation as well as the composition of districts is provided by Table I¹ in the 1827 Census of Lower Canada. It contains population data for each district (Québec, Montréal, Trois-Rivières and Gaspé) as well as data for the counties in the districts.

The term district was used for the first time in the Census of 1784.² The districts replaced the areas defined by the term *gouvernement* during the French regime.

Beginning in 1871, the mandate of the census included determining electoral representation, and this new purpose altered the use of the district as a geographic concept. This is shown by the first map of the new districts comprising the province of Quebec,³ where the number of districts in the province increase from 4 to 83; at the same time, the city of Quebec no longer forms part of the district of that name, but instead is composed of three districts numbered 145, 146 and 147.

In the provinces of Ontario and Quebec, districts and counties are often confused.⁴ Even the organizers of the Census of 1891 struggled with the concept, as county commissioners and district enumerators reported to the chief census officers. Table VI⁵ of the Census of 1891 offers the first comparison of electoral districts and census districts.

In the next census in 1901, population data were presented for census districts for the first time,⁶ but in 1911, the distinction between the two types of districts was less clear. By the time of the 1921 Census, the concept of federal electoral ridings associated with districts and sub-districts⁷ makes its first appearance, as does the replacement of census districts with census divisions.⁸

1. Minister of Agriculture. (1878). *Census of Canada, 1870-71*. Vol. IV. Ottawa.
2. Minister of Agriculture. (1878).
3. Minister of Agriculture. (1873). *Census of Canada, 1870-71*. Vol. I. Ottawa.
4. Minister of Agriculture. (1893). *Census of Canada, 1890-91*. Vol. I.
5. Minister of Agriculture. (1893), Table VI.
6. Minister of Agriculture. (1903). *Census of Canada, 1901*. Vol. I. Ottawa, Table 11.
7. Dominion Bureau of Statistics. (1924). *Census of Canada, 1921*. Vol. I. Ottawa.
8. Dominion Bureau of Statistics. (1924), Table 16.

data are not available for Québec City proper until the 1851 Census, as intervening censuses provided data for the district of Québec only.

The first census of industries was taken in 1827. Thus, we learn that the largest of the 14 types of industries in terms of establishments was sawmills. More of these mills were located in Québec City (288) than Montréal (200); however, Montréal surpassed it in terms of total number of industrial establishments, at 899 compared with 479. Talon started this trend, in a sense, by identifying occupations in 1666.

In 1831, the population was classified by religion for the first time. Previously, it was churches that had been enumerated in certain censuses. The census shows about 75% of the

population of Lower Canada was Catholic and this proportion was reflected in the districts of Québec and Montréal. However, Anglicans were relatively more numerous in the region of Québec (15.4%) than that of Montréal (13.5%), while the reverse was true of the population self-identifying as members of the Church of Scotland (6.0% and 8.3%, respectively).

Many other variables, in addition to religion and industry, made their first appearance in the Census of 1844: place of birth, education, health, occupation, and so on. Also in 1844, Québec City was experiencing another large wave of immigration;⁹ 25% to 30% of the population were born outside the country, many of them in Ireland. The large presence

of the Irish was due to the events of the 19th century, especially after 1815, when a growing population and deteriorating economic situation drove more and more people to leave their home country. This mass migration peaked following the terrible potato famine of the late 1840s.¹⁰

According to the data available for Lower Canada as well as for the districts of Québec and Montréal (which include the cities and their surrounding areas), we can reasonably deduce that in 1844, francophones probably accounted for less than half the populations of the cities of Québec and Montréal. In fact, in 1844, 75% of the population of Lower Canada was francophone, compared with 60.5% in the district

of Québec and 52.2% in the district of Montréal.

Decennial censuses

A firm believer in the importance of censuses, James Bruce, Lord Elgin and governor-general of Canada approved the establishment of the Board of Registration and Statistics in 1847. Under the *Census Act of the United Provinces*, a census was to be conducted in February and March of 1848 and again in the same months two years later.¹¹ On August 30, 1851, royal assent was given to a new law requiring that regular censuses be conducted starting in 1851 and continuing in 1861 and every tenth year thereafter. Thus, we can say that the year 1851 marked the beginning of Canada's decennial census. These innovations in census-taking would provide more reliable and regular statistics than had been available in the previous 100 years.

The 1851 and 1861 censuses

The 1851 and 1861 censuses are the only two decennial censuses conducted in Lower Canada. The population of Québec City stood at 42,052 in 1851, almost double its size in 1825. It continued to grow thereafter, reaching 51,109 persons in 1861. The large increase in population during the 19th century was the combined result of a relative decline in mortality and an increase in the birth rate.¹² And despite sustained immigration, the effect of this dynamic growth was also to increase the share of the population born in Canada from less than 70% in 1825 to almost 80% in 1861.

Confederation

The rebellions of 1837 and the widespread popular demand for an elected government based on representation by population led to the passage of the *Constitution Act*, 1867. Under Sections 8 and 51 of the Act, the census was to provide population figures that would be used to establish the number of representatives each province would

elect to the House of Commons. The key impact lay in the fact that it influenced the decision to standardize the *de jure* method and to conduct a census for specific geographic regions on a set date every 10 years. Thus, the first census taken under the Act was in 1871. Joseph Charles Taché played a key role in census-taking during the period from Confederation to the appointment of the first Dominion Statistician and the establishment of a permanent bureau of census and statistics.¹³

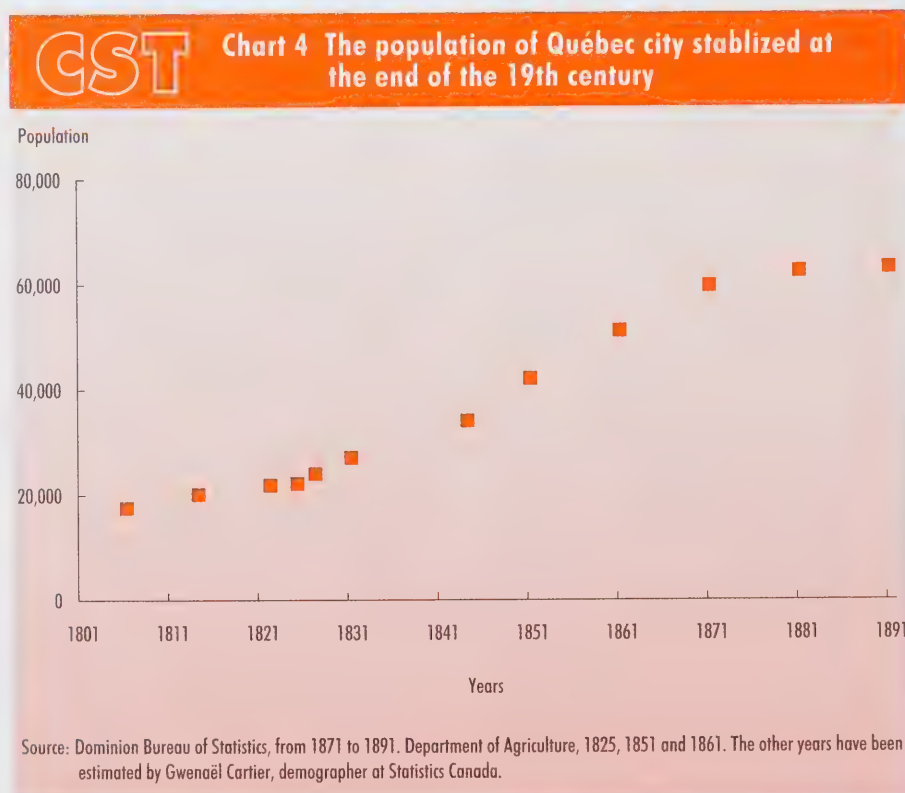
More detailed geographies provided better data for analyzing the demographic characteristics of the expanding urban population. The census of 1871 marks a turning point for the dissemination of new population statistics for Québec City. Data for neighbourhoods allows us to better appreciate the demographic changes occurring at the end of the 19th century. For example, in the context of the transition from a commercial to industrial economy, we can see the growth

in population in neighbourhoods like St-Roch, Jacques-Cartier, St-Saveur and St-Vallier in the eastern quarter of the city. The population there jumped from 28,305 in 1871 to 36,200 in 1891, while it declined in other neighbourhoods. In the late 19th century, the growth of Québec City slowed dramatically (Chart 4).

The 20th century

The pattern of decennial censuses that began in the latter half of the 19th century continued into the following century, providing valuable demographic information about Québec City. In addition, quinquennial censuses were instituted in 1956.

Early in the 20th century, Québec City enjoyed a population boom. Indeed, the city's third century can be divided into two distinct periods of growth. First, its population expanded from 68,840 in 1901 to 171,979 in 1961, following a pattern of almost continuous growth at a pace that did not begin to slow until after 1931. Subsequently, despite an increase in



1971, the population remained stable until 2001 (Chart 5).

The 21st century

On the basis of the results of the 2001 Census, the 21st century started out like the previous one. The population of Québec City on May 15, 2001, was 169,076, up slightly from the 1996 Census but still below the peak of 171,979 enumerated in 1961. The pattern of ongoing stability continued into the early part of the 21st century.

The municipal mergers of 2002

On January 1, 2002, there was a major change. Thirteen municipalities were amalgamated together to form a new Québec City. Overnight, this merger made the city's population balloon to 507,991.¹⁴ Four years later, another significant development took place. On January 1, 2006, two municipalities broke away from the new Québec City. As a result, the city "lost" 31,661 residents,¹⁵ and its population dropped below the half-million mark.

The 2006 Census

Thanks to the municipal mergers, the population of Québec City jumped from 169,076 in 2001 to 491,142 on May 16, 2006, the date of the most recent census. This made Québec City the province's second-largest city once again.¹⁶

At the time of writing, not all results are available from the 2006 Census, but we can state that the population of Québec City continues to age. In fact, persons aged 65 and older represent more than 16% of the total population, a historic high. In this context, another statistic needs to be emphasized: 53% of the population aged 15 and over was living in a couple (married or common law), a proportion which has not been seen since 1825.

In 2006, Québec City was a very francophone city, with almost 95% of residents affirming that French was their only mother tongue. On the other hand, persons born abroad accounted for about 5% of the population, exceeding the previous high of 4.5% recorded in 1891.

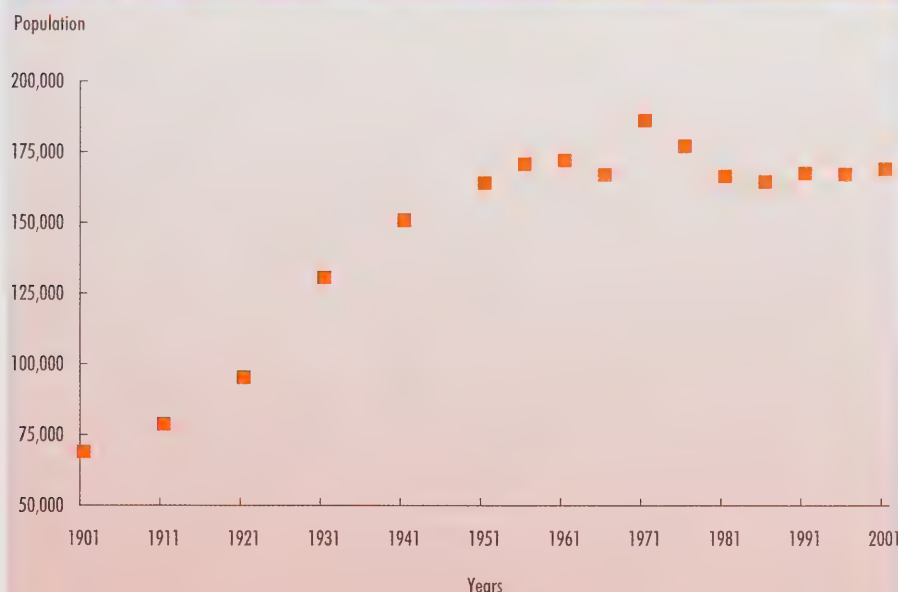
Québec City on its 400th anniversary

On July 3, 2008, Québec City will celebrate its 400th birthday. What will its population be on that day? According to municipal population estimates published by the Institut de la Statistique du Québec, its population was 502,119 in 2007.¹⁷ So we can say that Québec City will have a population of more than half a million as it celebrates its 400th anniversary. What a tribute to Samuel de Champlain and his crew, who founded the City of Québec under such harsh conditions.

GST

Gwenaél Cartier is a Regional Account Manager, Eastern Region (Montréal), Statistics Canada.

GST Chart 5 The population of Québec City doubled between 1901 and 1941, and peaked in 1971



Source: Dominion Bureau of Statistics, from 1901 to 1941. Statistics Canada, from 1951 to 2001.

1. Statistics Canada. (1984). *In the footsteps of Jacques Cartier*, Catalogue No. 11-X-524E. Ottawa; Minister of Industry, p. 52.
2. Jean Talon was Intendant of Justice, Police and Finance of New France for two terms, 1665-1668 and 1670-1672. Louis Robert de Fortel was originally selected as New France's first Intendant, but he never held the office. Talon conducted three censuses (1666, 1667 and 1671).
3. Statistics Canada. (2002). *2001 Census Handbook*. Catalogue No. 92-379-XPB. Ottawa; Minister of Industry, p. 1.
4. Statistics Canada, ESTAT, Jean Talon, <http://www.statcan.ca/english/freepub/98-187-XIE/jt.htm>.
5. Jacques Duchesneau conducted the 1675, 1676, 1679 and 1681 censuses. Duchesneau did not take Talon's place until 1675, as Frontenac governed New France without an intendant between 1672 and 1675.
6. Statistics Canada. (2002). *2001 Census Handbook*, p.2.
7. Regarding the size of the population of Québec City at the time of the 1765 census, a note written during the 1871 census indicates the use of an "estimate calculated as a proportion of previous censuses" for both Québec City and Montréal. In the 1784 census, the data collected tell us only about the demographic situation for the districts of Québec, Montréal and Trois-Rivières; the writer calculated an estimate based equally on those of Bouchette as well

as information from other censuses. As regards the population of Québec City at the time of the 1790 census, a note indicates it is approximately the same as in the census of 1765.

8. Mathieu de Costa worked for Pierre DuGua de Mons and also apparently served as Champlain's interpreter in his contacts with the Aboriginal peoples. Intendant Raudot legalized slavery in New France on April 13, 1709 [Dictionary of Canadian Biography Online. <http://www.biographi.ca/EN/index.html>]
9. In 1844, there were 87,178 immigrants in Lower Canada, which had a total population of 697,084.
10. Canadian Encyclopedia Historica. Accessed on April 3, 2008. <http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=f1SEC852191>
11. Statistics Canada. (2002). *2001 Census Handbook*, p.2.
12. Vital statistics for Québec City for the period 1771 to 1870 are available in Volume V of the Census of 1871.
13. Statistics Canada. (1993). *75 Years and Counting: A History of Statistics Canada*. Ottawa: Minister of Industry.p 6.
14. The population of Québec City on May 15, 2001, based on January 1, 2002, geography. Statistics Canada SGC 2006, Volume 1, Catalogue no. 12-517-XWE. Ottawa: Minister of Industry.
15. Statistics Canada (2006).
16. In the 2001 Census, the city of Laval came second with a population of 343,005. Five years later, it ranked third with a population of 368,709.
17. This estimate is available on the Web site of the Ministère des Affaires municipales et Régions du Québec in connection with the population decree. http://www.mamr.gouv.qc.ca/organisation/orga_donn_popu.asp

*As part of its contribution to dissemination of Census findings, Canadian Social Trends is highlighting some of the key trends observed in the 2006 Census of Population. In this issue, we present a brief adaptation of **Canada's Changing Labour Force, 2006 Census** (Catalogue no. 97-559).*

Overview of Canada's changing labour force

Between 2001 and 2006, total employment in Canada increased at an annual average rate of 1.7%, the fastest rate increase among the Group of Seven (G7) nations. Italy's growth rate of 1.2% was second followed by France and the United States of America. According to data from the Labour Force Survey, Canada's strong employment growth has continued beyond 2006. Employment rose in every part of the country. However, growth was strongest in the West, especially in Alberta and British Columbia.

Goods industries

Fastest growth in mining and oil and gas extraction

Among the goods industries, the fastest growth in employment between 2001 and 2006 occurred in the mining and oil and gas extraction industry. Employment reached 222,700 by 2006, an annual average gain of 7.5%. This was almost four times the national average of 1.7%. Alberta alone accounted for 70% of the employment growth in this industry.

Employment increased a strong 4.5% per year on average in the construction sector, bringing total employment to 991,200 in 2006. The gain in construction employment in Alberta and British Columbia exceeded the increase in Ontario and Quebec.

Largest decline in manufacturing

On the downside, manufacturing shed 136,700 jobs between 2001 and 2006, equivalent to a 1.4% decline per year. Total employment fell from about 2,033,200 to roughly 1,896,500. These losses were concentrated in Ontario (77,700 manufacturing jobs) and Quebec (56,600).

Canada's cut and sew clothing manufacturing industry lost nearly 33,000 jobs during the intercensal period, a 9.3% average annual decline.

Employment in the computer and telecommunications (CT) sector fell by 28,200, and was acutely felt in Ottawa-Gatineau.

The pulp, paper and paperboard mills industries shed 14,400 jobs over the five-year period, and employment in the sawmills and wood preservation industry fell by 14,200, with roughly half of the decline occurring in British Columbia.

Service industries

In contrast to the goods industries, employment increased across the board among the industries in Canada's services sector. Census data showed that employment in Canada's big retail trade sector, the largest service industry, was approaching parity with manufacturing.

Employment increased by 1.8% a year on average in retail trade between 2001 and 2006, or a total of 155,800 workers. This put the number of retail jobs at just over 1,815,000. Most of the big employment increase came from grocery stores, building materials and supplies stores and automobile dealerships.

Probably as a spin-off to the housing boom, employment growth was a strong 3.3% annual average in real estate, rental and leasing. This industry employed just over 293,000 people in 2006.

Strong growth also occurred in professional, scientific and technical services, which added 142,300 jobs, equal to an annual average rate of 2.9%. One factor in the growth of this industry was the demand for workers in architectural, engineering and related services, which was likely the result of increased demand for these services from the construction and oil and gas industries.

Canada's second largest service industry, health care and social assistance, added 199,900 workers, to bring employment in health care and social assistance to 1,667,700 in 2006. Increases were largest in Ontario, Quebec and Alberta.

Employment in the educational services industry rose by 123,600, or an average annual rate of 2.4%, bringing the total to 1,110,000 in 2006. Universities saw particularly fast growth, as enrolment also climbed.

Public administration grew to reach 943,700 in 2006, an average annual growth rate of 1.7% (the same rate as national employment growth). Overall, the bulk of these gains came from local, municipal, and regional public administrations.

Occupations

Small group has fastest growth in employment

The shift in industrial demand for workers to different parts of the economy had an impact on the occupational make-up of the nation. For example, the oil and gas industry is still relatively small, but its rapid expansion in recent years has meant huge gains for a number of occupations.

The number of oil and gas well drillers, servicers, testers and related workers almost doubled to 11,500, making it the fastest growing occupation between 2001 and 2006.

The housing boom ignited a round of hiring. Production clerks, many of whom are employed by construction businesses, saw their numbers increase 73.3% to 24,100. Meanwhile, the number of construction trades helpers and labourers rose 57.2% in 2006 to nearly 143,900. Many big ticket purchases increased work for loan officers to nearly 35,400, a gain of 13,900 (64.5%) since 2001.

Employment growth was also strong among postsecondary teaching and research assistants (65.7%). This gain mirrored the increase in postsecondary enrolment in recent years.

Census data showed 36,500 working estheticians, electrologists and related occupations, up 57.4% from 2001. This growth could be a reflection of Canada's expanding spa industry.

Fastest growing occupations, 2001 to 2006, Canada

Occupation	Employment in 2006	% growth 2001-2006
Oil and gas well drillers, servicers, testers and related workers	11,500	78
Production clerks ¹	24,100	73
Postsecondary teaching and research assistants	61,500	66
Loan officers	35,400	65
Construction inspectors	13,700	62
Estheticians, electrologists and related occupations	36,500	57
Construction trades helpers and labourers	143,900	57
Administrative clerks	101,700	54
Refrigeration and air conditioning mechanics	21,400	54
Petroleum engineers	9,000	54

1. Such as those employed by construction businesses to prepare production schedules.
Sources: Statistics Canada, censuses of population, 2001 and 2006.

Most common occupations

Between 2001 and 2006, truck driving was replaced by retail salespersons and sales clerks as the most common occupation among men. The third most common occupation among men was still retail trade managers.

Among women, the most prevalent occupation reported in 2006 was also retail salespeople and clerks, at just over 400,000. Cashiers were second at 256,000. With added hiring in health care and social assistance, nursing became the third most common occupation, moving up a couple of ranks since 2001.

Several occupations in manufacturing experienced large declines. For example, the number of machine operators dropped by 52,700 between 2001 and 2006. The number of metal fabricators, which included steel workers, fell by about 6,800, or 34.4%, and the number of mechanical assemblers and inspectors, including auto parts assemblers, who have a big presence in southern Ontario, also fell by 6,100, or 33.3%.

About 24,200 people in 2006 worked as electronics assemblers, fabricators, inspectors and testers, down 18.8% from 2001. These also included workers who manufacture audiovisual equipment, such as stereos, televisions and computer parts.

Lowest unemployment rate among those who studied education

By 2006, unemployment rates among people with all levels of education were relatively low compared to previous years. The Canadian economy, however, still places a premium on workers with higher levels of education. According to the census, Canadian workers ages 25 to 54 who had not completed high school had an unemployment rate of 9.4%. This was more than twice the rate of 4.2% among those who had completed a university degree.

The type of program that people have completed can also affect their chances of employment. Among people with postsecondary education, those in education studies had the lowest unemployment rate in 2006, at 3.0%.

Other fields of study for which graduates had low unemployment included biblical studies (3.2%), agriculture, health services, as well as parks, recreation and leisure studies (all were 3.6%).

Most common occupations for men and women, Canada, 2006

	Employment in 2006	Change 2001-2006
Men		
Retail salespersons and sales clerks	285,800	63,600
Truck drivers	276,200	40,900
Retail trade managers	192,200	-8,100
Janitors, caretakers and building superintendents	154,100	18,800
Farmers and farm managers	147,800	-21,200
Material handlers	147,000	13,900
Automotive service technicians, truck and bus mechanics and mechanical repairers	143,000	20,400
Carpenters	142,400	32,900
Construction trades helpers and labourers	133,600	47,500
Sales, marketing and advertising managers	102,600	10,200
Women		
Retail salespersons and sales clerks	400,000	68,600
Cashiers	255,500	35,500
Registered nurses	249,400	33,800
General office clerks	244,200	23,100
Secretaries (except legal and medical)	237,300	-16,500
Elementary school and kindergarten teachers	241,600	19,900
Food counter attendants, kitchen helpers and related occupations	194,800	23,100
Early childhood educators and assistants	157,700	31,700
Food and beverage servers	152,000	-2,900
Light duty cleaners	147,400	24,400

Sources: Statistics Canada, censuses of population, 2001 and 2006.

Labour mobility highest in North and Alberta

According to data on labour mobility, 562,800 (3.4%) of the total labour force moved to a different province or territory between 2001 and 2006. The most mobile area was the Northwest Territories, where more than one-fifth (21.5%) of its labour force had lived elsewhere in Canada in 2001, followed by Nunavut (15.7%) and the Yukon Territory (14.1%).

Among the provinces, Alberta had the labour force with the highest mobility in 2006, with 8.6% having lived in another province or territory five years earlier. An estimated 160,500 people in Alberta's labour force had moved to the province from other parts of Canada since 2001.

Mobility was highest in two industries: mining, oil and gas extraction, and public administration. In the mining, oil and gas industry, a full 8.1% of those employed in the industry,

about 17,700 workers, had lived in another province or territory five years earlier.

An estimated 51,400 people in public administration, 5.5% of the workforce, had also moved from one province or territory to another in the intercensal period.

The aging workforce

Census data showed that in 2006, workers aged 55 and older accounted for 15.3% of the total labour force, up from 11.7% in 2001. As a result, the median age of the labour force surpassed the 40-year mark for the first time; it rose from 39.5 years in 2001 to 41.2 years in 2006.

According to the census, just over 2 million individuals aged 55 to 64 were employed in 2006, 43.0% more than in 2001. At the same time, the overall labour force participation rate for this group increased from 54.0% to 59.7%.

Farmers had the highest median age (52 years) of all occupations in 2006 (up from 51 years in 2001); they were followed by real estate agents and property administrators (51 years). Other occupations with a median age of about 50 years were ministers, bus drivers and other transit operators, senior managers in health, education, social and community services, and senior government managers.

Immigrants made up over one-fifth of Canada's labour force in 2006

Of the 17,146,100 people in the labour force in 2006, an estimated 3,634,800 were foreign-born. They accounted for slightly over one-fifth (21.2%) of Canada's total labour force in 2006, up from 19.9% previously.

Employment rates for immigrants increased between 2001 and 2006 among those aged 25 to 54 from 76.4% to 77.5%. (The employment rate for the core working-age Canadian born increased from 80.9% to 82.4% in the same period.)

Of the recent immigrants who arrived in Canada between 2001 and 2006, 636,500 (or 57.3%) were in the core working-age group. The employment rate of this population was 67.0% in 2006, up from 63.4% in 2001. This increase was faster than the gain among their Canadian-born counterparts.

The lion's share of recent core working-age immigrants went to the Ontario labour market (51.1%), followed by Quebec (19.2%) and British Columbia (15.9%). In Ontario, they recorded an employment rate of 68.5%; in Quebec, it

was 58.2%; and in British Columbia, 67.1% were working in 2006.

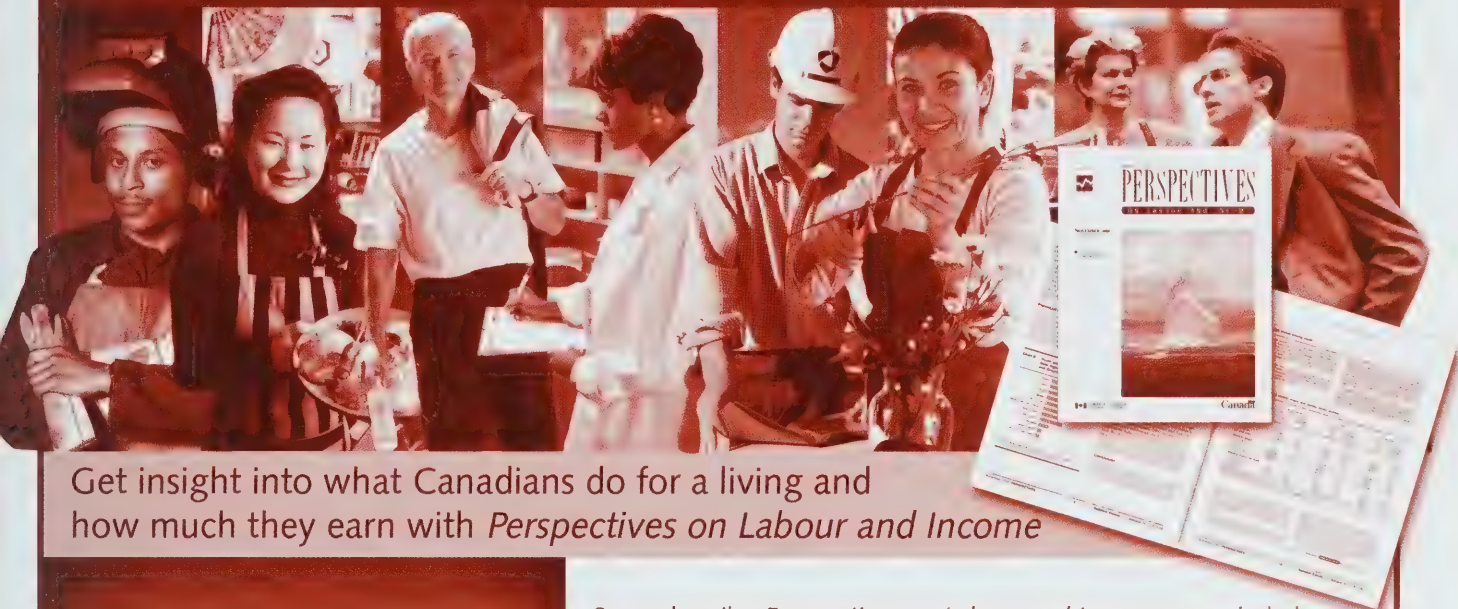
Labour market conditions improved for both recent immigrant men and women in the core working-age group in 2006 compared to 2001. Despite this, recent immigrants continued to have lower employment rates than the Canadian born.

Employment rates among recent immigrant men and their Canadian-born counterparts were closer in 2006 than they had been five years earlier. About 78.6% of recent male

immigrants aged 25 to 54 were employed in 2006, up 4.1 percentage points from 2001. During the same period, the employment rate of Canadian-born men rose by only 0.6 percentage points, to 86.3%.

Recent immigrant women also narrowed the gap with their Canadian-born counterparts. Their employment rate rose from 53.2% to 56.8% between 2001 and 2006. This was greater than the increase experienced by Canadian-born women, whose employment rate rose from 76.3% to 78.5%.

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Life in metropolitan areas

A profile of perceptions of incivility in the metropolitan landscape

by Leslie-Anne Keown

Few things grab headlines and invoke public concern like the issue of crime in our neighbourhoods. Although few of us may have experienced a serious crime or even have seen one being committed, we are very aware of the "signs of crime" around us. These "signs of crime," which criminologists often call incivility, range from evidence of drug dealing and drug use to garbage littering the area.^{1,2,3,4,5}

These incivilities remind us that crime might be all around us and could potentially intrude into our lives. For instance, garbage and litter strewn on the streets may serve as an indication that an area is not well cared for and that it may encourage illegal activities like drug dealing; as such, the place may seem threatening and increase our concern for our safety. When they become sufficiently uneasy about incivilities like littering, rowdiness, drug use and public drinking, people may feel that their neighbourhoods are unsafe. If this opinion lingers over time, residents may move away or change their behaviour—stay home at night, avoid certain areas and refuse

to use public transit—in ways that can change the rhythm of life in the whole community.⁶

A person's perceptions of incivility in their local area arise from a constellation of influences, including personal experience, the tone of media reports about the "crime" problem in the city and/or neighbourhood, and the anecdotes recounted by significant people in the person's life.

Regardless of their origin, these perceptions play a central role in fear of crime and, subsequently, in citizens' demands that government and criminal justice institutions solve the "crime problem," particularly at a local level.^{7,8,9,10} Community policing and similar policing strategies are often directly focused on reducing incivility in order to alter residents' perceptions of their neighbourhoods, thereby increasing their feelings of safety and security.^{11,12}

However, little is known about the prevalence of these perceptions in Canadian neighbourhoods. This article uses data from the 2004 General Social Survey (GSS) on

victimization to discuss the types of incivilities Canadians in the 12 largest Census Metropolitan Areas identify as the biggest problems in the neighbourhood where they live. It also examines whether these perceptions vary by type of neighbourhood.

Large majority of residents do not report incivility in their neighbourhoods

Overall, people believe that the metropolitan landscape in their city is civil. Three-quarters of Canadians aged 15 and over (75%) living in the 12 largest Census Metropolitan Areas (CMAs) said they felt there were no problems with incivility in their particular neighbourhoods. Only one in four residents reported that they believed some type of incivility was causing problems in the area where they lived. However, this overview masks substantial variation in perceptions of incivility in each CMA: there is a wide continuum of perception among the 12 CMAs and, as we shall see, even within CMAs themselves.

This article is based on data collected by the 2004 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. In 2004, Cycle 18 of the GSS on victimization collected information on Canadians' experience of victimization, and public attitudes towards crime, police, courts, prison and parole.

The target population of the 2004 GSS included all people aged 15 and over. Data were collected each month from January to December 2004. Over this period, approximately 24,000 individuals were successfully interviewed. This article uses only respondents who resided in the 12 largest Census Metropolitan Areas (CMAs). The analytic sample was composed of over 11,000 respondents representing approximately 13.9 million Canadians.

Although there is some variation in reported levels of physical and social incivility between CMAs, this article focuses on the overall patterns observed rather than differences between cities. Inter-city variation can be explained by factors such as cultural tolerance for deviance, diversity of building and construction histories, and other intangible elements not captured by household surveys.

Definitions

Physical incivility: This article considers two 2004 GSS questions that address physical incivility:

"How much of a problem are..."

... garbage or litter lying around?

...vandalism, graffiti and other deliberate damage to property or vehicles?

Respondents who answered "A very big problem" or "A fairly big problem" to either question were defined as perceiving physical incivility to be a problem in their neighbourhood. (Those who replied "Not a very big problem" or "Not a problem at all" were defined as perceiving no physical incivility in their neighbourhood.)

Social incivility: Similarly, six questions address social incivility:

"How much of a problem are..."

... noisy neighbours or loud parties?

... people hanging around on the streets?

... people sleeping on the streets or in other public places?

... people using or dealing drugs?

... people being drunk or rowdy in public places?

... prostitution?

As with physical incivility, those respondents who answered "A very big problem" or "A fairly big problem" to any question were defined as perceiving social incivility to be a problem in their neighbourhood.

Census Metropolitan Area (CMA): A CMA is an area consisting of one or more adjacent municipalities situated around a major urban core. A CMA must have a population of at least 100,000, and the urban core must have a population of at least 50,000. The term CMA is used interchangeably with "city" in this article.

City: All references specific to a city or cities in this article refer to the CMA of the same name.

Predominantly urban: Predominantly urban neighbourhoods are census tracts located close to the city centre (less than 5 kilometres from the city centre) and having high-density housing.

Predominantly suburban: Predominantly suburban neighbourhoods are census tracts located in peripheral areas (15 kilometres or more from the city centre) and having low-density housing.

Methodology

In this study, the **city centre** is the census tract that contains the city hall of the central municipality; hence, the distance from the city centre is the distance between the neighbourhood of residence and the census tract containing the central municipality's city centre. *Central* neighbourhoods are neighbourhoods that are less than 5 kilometres from the city centre. Other neighbourhoods are referred to as either *mid-city* or *peripheral neighbourhoods*, and are differentiated by their distance from the city centre; for example, neighbourhoods that are between 5 and 15 kilometres from the city centre are regarded as part of the mid-city.

Neighbourhood density is based on the type of dwellings the neighbourhood contains. *Low-density* neighbourhoods contain single and semi-detached dwellings and mobile homes. Such dwellings are considered to be traditional suburban dwellings. Specifically, low-density neighbourhoods are neighbourhoods in which at least 66.6% of the dwellings are traditional suburban dwellings. *High-density* neighbourhoods are essentially composed of apartment and

GST What you should know about this study (continued)

condominium buildings (whether high-rise or low-rise) and row houses. Such dwellings are characteristic of traditional urban neighbourhoods. High-density neighbourhoods are neighbourhoods in which less than 33.3% of the dwellings are traditional suburban dwellings. *Medium-density* neighbourhoods

are characterized by mid-level concentrations of 33.3% to 66.6% traditional suburban dwellings.

For more details on how these criteria were defined, see "The city/suburb contrast: How can we measure it?" in *Canadian Social Trends*, no. 85.

Physical incivility is not a large problem for most metropolitan residents

Researchers generally divide incivility into two types—physical and social. Physical incivility is defined to exist when people believe that conditions such as excessive litter, abandoned buildings, graffiti, vandalism, and vacant lots constitute a problem in the area where they live. (Social incivility is discussed in the next section.)

To address issues of physical incivility, the 2004 GSS asked respondents to describe the extent of problems in their neighbourhood with (1) garbage or litter lying around, and (2) vandalism, graffiti and other deliberate damage to property or vehicles. Respondents who replied it was "A very big/A fairly big problem" were defined as perceiving physical incivility to exist. (See "What you should know about this study" for a complete description.)

Overall, 9% of residents living in Canada's 12 largest CMAs perceived garbage or litter lying around to be a problem in their neighbourhood (Table 1). However, not all CMAs reported similar rates. While 4% of residents in the CMA of Québec City observed a problem with garbage and litter, 11% to 12% of residents in the CMAs of Hamilton, Regina, and Montréal indicated they had the same problem.

Just over one in ten (11%) Canadians in the 12 CMAs described vandalism and graffiti as a problem in the community where they lived. Québec City once again had the

lowest rate (6%), while Winnipeg and Regina reported much higher levels of concern, with 17% of residents perceiving a problem.

A clearer picture emerges when physical incivility in general is examined. Overall, 16% of residents in the 12 CMAs described at least one type of physical disorder as a problem. In most CMAs, the proportion of residents who felt that way about their neighbourhoods fell within a range of 12% to 20%.

However, two exceptions are notable. The lowest level of perceived problems with physical incivility was reported in Québec City (8%); the highest level was in Regina, where 23% of residents said they felt there was a problem with at least one type of physical incivility.

Therefore, while about one in six individuals living in Canada's 12 largest CMAs observed a problem with physical incivility in their neighbourhood, there is variability

GST Table 1 Over one in six residents of Canada's 12 largest CMAs¹ perceive physical incivility to be a problem in their neighbourhood

	Population aged 15 and older reporting a problem with...		
	At least one type of physical incivility	Garbage/litter lying around	Vandalism and graffiti
	percentage		
Average (all 12 CMAs¹)	16	9	11
Halifax	17	10	11
Québec City	8	4 ^E	6 ^E
Montreal	17	11	13
Ottawa—Gatineau	12	7	7
Toronto	14	9	9
Hamilton	16	12 ^E	9 ^E
Winnipeg	20	9	17
Regina	23	11 ^E	17
Saskatoon	18	9 ^E	15
Calgary	13	7	9
Edmonton	17	9	13
Vancouver	19	10	15

^E use with caution

1. Census Metropolitan Area.

Note: Do not use this table to compare one CMA to another. To know whether or not differences between CMAs are statistically significant, see Table A.1.

Source: Statistics Canada, General Social Survey, 2004.

in the levels reported. These differences are not easily explained. Of course, each individual CMA has its own unique character and thus a multitude of factors are likely to be at play here, including levels of tolerance for specific behaviours (see "What is a threshold effect and why does it matter?" for a discussion of tolerance). Differences between CMAs in terms of their architecture, climate, demographic make-up and infra-structure create a vast array of urban landscapes that will influence perceptions of incivility, and the effects of these unique identities are not easily captured.^{13,14,15}

Social incivility is seen as a problem by 1 in 5 metropolitan residents

The second type of incivility that residents may report as a problem is social incivility. Social incivility includes the perception that disruptive behaviour such as inconsiderate and noisy neighbours,

drunks, drug use and drug dealing, and homelessness are a problem in one's neighbourhood.^{16,17,18}

This study considers six types of social incivility that residents perceive to be a problem in their neighbourhood. Based on the 2004 GSS interview, they are: (1) noisy neighbours and /or loud parties; (2) people hanging around; (3) people sleeping on the streets; (4) people using or dealing drugs; (5) people being rowdy and/or drunk in public places; and (6) prostitution. (See "What you should know about this study" for a complete description.)

These behaviours have been widely used by criminologists to measure social incivilities that reflect the "signs of crime" visible in public places such as parks, boulevards, bus stops, malls, and so on. It is perceptions of social incivility in these shared spaces that are thought to be principal contributors to citizens' feelings of insecurity and fear of crime.^{19,20}

One in five metropolitan residents perceived at least one type of social incivility to be a problem in their neighbourhood (Table 2). However, this varied considerably by CMA. In Québec City, Hamilton, Winnipeg, Regina, and Calgary, about one in six inhabitants observed social incivility. Ottawa/Gatineau, Toronto, Saskatoon, and Edmonton had a slightly higher rate, with approximately one in five residents reporting at least one problem. The CMAs having the highest rates of perceived social incivility—with one in four residents observing a problem where they lived—were Halifax, Montréal, and Vancouver.

In all 12 CMAs (except Regina), using and dealing drugs was most commonly perceived to be a problem, with between 9% and 19% of residents reporting that they thought there was a drug problem in their local area. The types of social incivility least often observed were prostitution and people sleeping on the streets,

CST

Table 2 One in five residents report that at least one type of behaviour creates a problem with social incivility in their neighbourhood

Population aged 15 and older reporting a problem with...

	At least one type of social incivility	Noisy neighbours/ loud parties	People hanging around	People sleeping on the streets	People using or dealing drugs	People drunk or rowdy in public places	Prostitution
	percentage						
Average (all 12 CMAs¹)	21	7	9	3	14	8	4
Halifax	25	7	12	F	17	9	3 [†]
Québec City	16	5 ^E	5 ^E	F	11	8	2 [†]
Montréal	24	8	10	3	15	8	5
Ottawa—Gatineau	21	9	9	2 ^E	13	6 ^E	3 [†]
Toronto	20	6	9	4	13	7	4
Hamilton	18	4 ^E	8 ^E	F	12	8 ^E	F
Winnipeg	19	7	9	2 ^E	13	9	4
Regina	17	6 ^E	10 ^E	F	8 ^E	7 ^E	5 [†]
Saskatoon	21	6 ^E	8 ^E	F	12 ^E	9 ^E	F
Calgary	16	6 ^E	5 ^E	2 ^E	9	6 ^E	F
Edmonton	22	6	9	4 ^E	15	9	3 [†]
Vancouver	26	9	12	6	19	11	8

^E use with caution

^F too unreliable to be published

¹ Census Metropolitan Area.

Note: Do not use this table to compare one CMA to another. To know whether or not differences between CMAs are statistically significant, see Table A.2.

Source: Statistics Canada, General Social Survey, 2004.

at less than 5%. The exception is Vancouver, where between 6% and 8% of residents described at least one of these behaviours as causing a problem in the community where they lived.

Areas of high housing density perceive a higher level of incivility

Although the differences between different large CMAs are interesting, the picture is incomplete. Incivility is asked about at the neighbourhood level and therefore, to truly understand how levels of incivility vary throughout cities, it is necessary to explore different localities within CMAs.

In an article published in the January 2008 issue of *Canadian Social Trends*, Martin Turcotte showed that both density of housing and distance from city hall capture vital aspects of neighbourhoods within cities.^{21,22} Using Turcotte's geographic system allows us to examine two archetypes of city neighbourhoods—predominantly urban environments and predominantly suburban environments—and the relationship between these archetypes and perceptions of incivility.

We now turn our attention to Montréal, Toronto, and Vancouver to examine the relationship between neighbourhood type and perceptions of incivility. (Only these three CMAs have sufficiently large sample sizes to make an examination of incivility by urban/suburban characteristics possible.)

The first types of neighbourhoods examined in the metropolitan landscape are characterized by housing density. "Area of high-density housing" is really short-hand for "large numbers of people living in a small geographic space." This type of neighbourhood is thought to have two main influences on perceptions of incivility. First, the presence of large numbers of strangers and the wide array and number of interactions that occur in high-density areas could increase

the likelihood of residents observing disruptive behaviour. Second, and paradoxically counteracting this potential increase in perceived

incivility, residents may have a tolerance for diverse behaviours. Thus, in order for drunkenness, as an example, to be seen as a problem, a

CST

Table 3a Perceptions of physical incivility are significantly higher in city central neighbourhoods...

	Population aged 15 and over reporting physical incivility		
	Montréal CMA ¹	Toronto CMA	Vancouver CMA
	percentage		
Total	17	14	19
Housing density			
High †	26	19	29
Medium	12*	17*	18*
Low	8	11*	13*
Distance from city centre			
Central (less than 5 km) †	38	27	39
Mid-city (5 to 15 km)	20*	17*	13*
Peripheral (15 km or more)	9*	11*	16*
Neighbourhood type			
Predominantly urban (high-density + central) †	41	27	40
Predominantly suburban (low-density + peripheral)	7 ^E *	11*	12 ^E *

CST

Table 3b ... Similarly, social incivility is more commonly reported in central neighbourhoods

	Population aged 15 and over reporting social incivility		
	Montréal CMA ¹	Toronto CMA	Vancouver CMA
	percentage		
Total	24	20	26
Housing density			
High †	33	34	40
Medium	19*	21*	25*
Low	14*	15*	17*
Distance from city centre			
Central (less than 5 km) †	40	41	42
Mid-city (5 to 15 km)	28*	21*	22*
Peripheral (15 km or more)	15*	17*	23*
Neighbourhood type			
Predominantly urban (high-density + central) †	43	51	51
Predominantly suburban (low-density + peripheral)	13*	15*	16*

^E use with caution

† Reference group.

* Significant difference from reference group at $p < 0.01$.

1. Census Metropolitan Area.

Note: Do not use these tables to compare between CMAs.

Source: Statistics Canada, General Social Survey, 2004.

greater number of events of greater severity would be needed to push past residents' acceptance of "usual" drunken behaviour and increase their sensitivity to public drunkenness as a neighbourhood problem. In contrast, people living in an area of low housing density could see even a single rowdy stranger as a neighbourhood problem because strangers and disruptive behaviour are more noticeable and alarming when they are out-of-the-ordinary events in a specific locale.^{23,24,25} These differing perceptions of what constitutes unacceptable or disruptive behaviour, depending on the location in which it is encountered, could be called a threshold effect. (See "What is a threshold effect and why does it matter?" for a discussion of tolerance.)

Toronto, Montréal, and Vancouver all show a similar pattern of perceived incivility in relation to housing density: that is, perceptions of both physical and social incivility rise as housing density increases (Table 3). In areas of low housing density such as suburbs in Toronto, for example, 15% of residents perceived that social incivility was a local problem. However, in areas of high housing density, more than double that proportion of residents (34%) observed a problem. This pattern suggests that the presence of strangers and range of behaviours perceived to be posing a problem is much greater in areas of high housing density, in spite of the threshold effect.

People living in close proximity to the city centre are more likely to perceive incivility

Often, the high housing density associated with strangers, diverse unwelcome behaviours and social or physical incivility is linked to physical distance from the city centre. Residents of neighbourhoods near the city centre may observe more "signs of crime" than those who reside in more peripheral areas.

GST

What is a threshold effect and why does it matter?

Individuals have different tolerances for a variety of behaviours, and the level of tolerance one has for a behaviour before it becomes a problem can vary by circumstance. For instance, the threshold where loud music becomes irritating to a parent is probably much lower than the threshold for a teenager. Thus, parents will generally perceive loud music to be a problem long before their teenager will. Furthermore, the point at which it becomes unacceptable to a parent may be lower in the late evening than in the early afternoon.

Perceptions of incivility are thought to operate in a similar manner and this influence is called the "threshold effect." In central neighbourhoods, people "hanging out" may be an ordinary sight and so not be seen as a difficulty; but in a suburb, seeing the same behaviour may signal a very significant problem to the observer. However, even in the downtown area, observing people hanging out on the street continually, or in unusual circumstances, may mean that the behaviour is then considered problematic.

Thus, threshold effects are important because they help us to understand that the perception of something as a problem is not merely contingent on the number or frequency of incivil behaviours being observed, but is also connected to individual personality, locality, and time of day. Furthermore, it is important that the respondent reports behaviours that occurred in a specific location. The GSS does specify incivil behaviour observed in the respondent's neighbourhood, thereby providing the respondent with a clear frame of reference when answering the question.

Innes, M. (2004). Signal crimes and signal disorders: Notes on deviance as communicative action. *The British Journal of Sociology*, 55(3): 335-355.

Regoecki, W. (2002). The impact of density: The importance of non-linearity and selection on flight and fight responses. *Social Forces*, 81(2):505-530.

Sampson, R. J., and Raudenbush, S. W. (2004). Seeing disorder: Neighbourhood stigma and the social construction of "broken windows". *Social Psychology Quarterly*, 67(4), 319-342.

While we might expect outlying areas to have less tolerance for specific behaviours than central areas, the pattern in perceptions of incivility in all three CMAs is the same as that seen for housing density: the highest rates are reported in central neighbourhoods and the lowest in peripheral areas at least 15 kilometres from the city centre. For instance, in Vancouver 39% of residents living close to the city centre described a neighbourhood problem with physical incivility, compared to only 16% of those living in peripheral neighbourhoods, despite any influence that the threshold effect may be having.

Rates of perceived incivility are two to four times higher in predominantly urban than predominantly suburban neighbourhoods

As interesting as these patterns of perceived incivility are, the real contrast can be seen when housing density and distance from the city centre are used together. Combining these two measures allows us to consider two ideal types or archetypes of the contemporary urban landscape: 1) predominantly urban landscapes, which are characterized by high-density housing in the central city; and 2) predominantly suburban

landscapes, which are characterized by low-density housing in the most peripheral areas of the city.

In the predominantly urban neighbourhoods of the CMAs of Montréal, Toronto, and Vancouver, residents are two to four times more likely to report a problem with incivility in their local area than those in predominantly suburban areas. This is true regardless of the type of incivility. For instance, in Montréal, 13% of suburban residents cited a problem with at least one type of social incivility in their local area, compared to 43% of Montrealers living in a predominantly urban environment (Table 3).

This variation between predominantly urban and suburban neighbourhoods is more thoroughly

understood when we consider whether both physical and social incivility are perceived as problems, if only one is reported to be a problem, or if neither is deemed troublesome.

First, in all three CMAs, 80% or more of residents of the predominantly suburban landscape perceive no local problems with incivility (Table 4). In contrast, 47% of people in predominantly urban landscapes do not perceive problems with incivility.

A similar pattern is revealed when we shift our attention to those residents who perceive problems with both physical and social incivility. In predominantly suburban environments, between 4% and 8% of residents observed both types of incivility. In contrast, in predominantly

urban neighbourhoods, 25% to 37% of residents complained of problems with both types of incivility. Clearly, predominantly urban and predominantly suburban landscapes are very different places with respect to their residents' perceptions and experiences of incivility in their day-to-day lives.

Thus, in spite of the threshold effect, residents of urban neighbourhoods in Canada experience a social environment quite unlike that of their fellow citizens living in suburbs. This contrast in experience suggests that researchers need to continue exploring these disparate metropolitan landscapes, while clearly recognizing that they are also distinct social environments.



Table 4 Compared to people living in central neighbourhoods, residents of peripheral neighbourhoods are 20% to 30% less likely to report that incivility is a problem

Population aged 15 and over reporting incivility

	Montréal CMA ¹ Type of incivility ²			Toronto CMA Type of incivility			Vancouver CMA Type of incivility		
	Neither	One type	Both types	Neither	One type	Both types	Neither	One type	Both types
Total	71	17	12	76	15	9	69	18	14
Housing density									
High/Medium †	64	20	16	70	17	13	63	20	17
Low	83*	12*	5 [†] *	81*	13*	6*	79*	13*	8*
Distance from city centre									
Central (less than 5 km) †	50	20 [†]	30	55	22	23	51	19	30
Mid-city (5 to 15 km)	65*	21	14*	73*	16*	11*	74*	17	9 [†] *
Peripheral (15 km or more)	82*	12*	6*	80*	13*	7*	72*	17	11*
Neighbourhood type									
Predominantly urban (high-density + central) †	47	21 [†]	31	47	28	25	47	17 [†]	37
Predominantly suburban (low-density + peripheral)	84*	12*	4 [†] *	81*	13*	6*	80*	13 [†]	8 [†] *

[†] use with caution

† Reference group.

* Significant difference from reference group at $p < 0.01$.

1. Census Metropolitan Area.

2. Types are physical incivility and social incivility.

Note: Do not use this table to compare between CMAs.

Source: Statistics Canada, General Social Survey, 2004.

Summary

For most residents of Canada's large cities, problems with either social or physical incivility in local neighbourhoods are absent. However, the proportion of residents reporting a problem does vary considerably among CMAs and by type of incivility. In general, residents of Canada's 12 largest CMAs more often reported that social incivility rather than physical incivility was a problem. However, results do vary greatly by CMA.

Clearer patterns were discovered when the urban landscape of Canada's three largest cities (Montréal, Toronto, and Vancouver) was taken into account. In these CMAs, residents of areas with high housing density or near the city centre reported more problems with incivility in their neighbourhoods than those living in other parts of the metropolitan landscape. The sharpest contrasts were seen between predominantly urban and predominantly suburban neighbourhoods.

The vast majority of residents living in a predominantly suburban landscape perceived their neighbourhoods had no problems with either physical or social incivility. This was true of less than half of those living in predominantly urban landscapes.

Though residents of individual cities describe different experiences with incivility, the true contrast is between those who live in a predominantly urban environment versus a predominantly suburban environment. Perceptions of incivility in Canada are heavily influenced by place of residence in the metropolitan

area, and these differences appear to reflect the character of archetypal urban environments rather than individual metropolitan areas.



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Table A.1 Comparison matrix between CMAs¹ showing percentage point difference between individual CMAs, physical incivility

	Halifax	Québec City	Montréal	Ottawa-Gatineau	Toronto	Hamilton	Winnipeg	Regina	Saskatoon	Calgary	Edmonton	Vancouver
	percentage point difference											
Halifax	...	9*	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Québec City	9*	...	9*	ns	6*	8*	12*	15*	10*	ns	9*	11*
Montréal	ns	9*	...	ns	ns	ns	ns	ns	ns	ns	ns	ns
Ottawa-Gatineau	ns	ns	ns	...	ns	ns	8*	11*	ns	ns	ns	7*
Toronto	ns	6*	ns	ns	...	ns	6*	9*	ns	ns	ns	5*
Hamilton	ns	8*	ns	ns	ns	...	ns	ns	ns	ns	ns	ns
Winnipeg	ns	12*	ns	8*	6*	ns	...	ns	ns	7*	ns	ns
Regina	ns	15*	ns	11*	9*	ns	ns	...	ns	10*	ns	ns
Saskatoon	ns	10*	ns	ns	ns	ns	ns	ns	...	10*	ns	ns
Calgary	ns	ns	ns	ns	ns	ns	7*	10*	10*	...	ns	6*
Edmonton	ns	9*	ns	ns	ns	ns	ns	ns	ns	ns	...	ns
Vancouver	ns	11*	ns	7*	5*	ns	ns	ns	ns	6*	ns	...

... not applicable

* Difference between CMAs is statistically significant at $p < 0.01$.

ns No statistically significant difference.

1. Census Metropolitan Area.

Note on interpreting this matrix table: Choose the row containing one of the CMAs you wish to compare, and follow it until you reach the column for the other CMA.

The cell shows the percentage point difference between rates of physical incivility in the two CMAs. If the difference is not statistically significant, the cell shows "ns" (blank).

For example, there is a statistically significant 9 percentage point difference between Halifax and Québec City (17% and 8% respectively, as shown in Table 1). However, the difference between Halifax and any other CMA in the study is not statistically significant.

Source: Statistics Canada, General Social Survey, 2004.

Table A.2 Comparison matrix between CMAs¹ showing percentage point difference between individual CMAs, social incivility

	Halifax	Québec City	Montréal	Ottawa-Gatineau	Toronto	Hamilton	Winnipeg	Regina	Saskatoon	Calgary	Edmonton	Vancouver
	percentage point difference											
Halifax	...	9*	ns	ns	ns	ns	ns	ns	ns	9*	ns	ns
Québec City	9*	...	8*	ns	ns	ns	ns	ns	ns	ns	ns	10*
Montréal	ns	8*	...	ns	ns	ns	ns	ns	ns	8*	ns	ns
Ottawa-Gatineau	ns	ns	ns	...	ns	ns	ns	ns	ns	ns	ns	ns
Toronto	ns	ns	ns	ns	...	ns	ns	ns	ns	ns	ns	6*
Hamilton	ns	ns	ns	ns	ns	...	ns	ns	ns	ns	ns	8*
Winnipeg	ns	ns	ns	ns	ns	ns	...	ns	ns	ns	ns	7*
Regina	ns	ns	ns	ns	ns	ns	ns	...	ns	ns	ns	9*
Saskatoon	ns	ns	ns	ns	ns	ns	ns	ns	...	ns	ns	ns
Calgary	9*	ns	8*	ns	ns	ns	ns	ns	ns	...	ns	10*
Edmonton	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	...	ns
Vancouver	ns	10*	ns	ns	6*	8*	7*	9*	ns	10*	ns	...

... not applicable

* Difference between CMAs is statistically significant at $p < 0.01$.

ns No statistically significant difference.

1. Census Metropolitan Area.

Note on interpreting this matrix table: Choose the row containing one of the CMAs you wish to compare, and follow it until you reach the column for the other CMA.

The cell shows the percentage point difference between rates of social incivility in the two CMAs. If the difference is not statistically significant, the cell shows "ns" (blank).

For example, there is an 8 percentage point difference between Montréal and Québec City (24% and 16%, as shown in Table 2) and an 8 percentage point difference between Montréal and Calgary (24% and 16%). However, the difference between Montréal and any other CMAs in the study is not statistically significant.

Source: Statistics Canada, General Social Survey, 2004.

2007 General Social Survey Report

The retirement plans and expectations of older workers

by Grant Schellenberg and Yuri Ostrovsky

After many years of public discussion about Canada's aging population, the leading edge of the baby boom generation is now on the cusp of retirement. Individuals born in 1946 are turning 62 this year—the average retirement age according to the Labour Force Survey—and over the coming decade more Canadians will retire than ever before. How do these individuals view this transition? When do they intend to retire and how firm are their plans? Do they believe they've made adequate financial preparations? These are the sorts of questions that are addressed in this series of *Canadian Social Trends*, dedicated to the 2007 General Social Survey Report.

Focusing on Canadians aged 45 to 59, we examine the age at which individuals intend to retire, the certainty of their plans, and their expectations regarding their retirement income. All three are subjective assessments—shaped by people's hopes and concerns, their circumstances, and the information they have. Whether their plans and expectations will come to fruition cannot be said, but evidence from the 2007 General Social Survey (GSS) shows that they are related

to demographic, employment and financial characteristics. These are the focus of this article.

About half of near-retirees plan to retire at ages 60 to 65

"Near-retirees"—defined as non-retired Canadians aged 45 to 59—who responded to the 2007 GSS were asked several questions regarding their retirement plans and expectations (see "What you should know about this study"). When asked, *At what age do you plan to retire?* three-quarters of them state a specific age. The other quarter either say they don't know when they'll retire (14%) or that they don't intend to retire (11%).

Across all near-retirees (including those who don't intend or don't know when they will retire), 22% plan on leaving the workforce before age 60 and 25% plan on doing so between the ages of 60 and 64. Age 65 is still an important reference point for retirement, with 25% of near-retirees planning to leave the workforce at that age. Another 4% plan on retiring at age 66 or older.

There has been a recent increase in the labour force participation rates of older workers in Canada,¹ raising the

question of whether the retirement plans of working Canadians are also being pushed back. We draw on the 1991 Survey of Ageing and Independence (SAI) and the 2002 and 2007 General Social Surveys (GSS) to address this question. Because of differences in the designs of these surveys, our analysis is limited to individuals aged 45 to 59 who were employed throughout the 12 months prior to each survey. Since data are drawn from three different surveys, estimates may be influenced by differences in questionnaire content and survey design. A cautious interpretation of the results is thus warranted.

Between 1991 and 2007, the proportion of near-retirees aged 45 to 49 planning on retiring before age 60 decreased by about 4 percentage points, while the share planning on retiring at age 65 or older increased by about 7 percentage points (Table 1).

Similar patterns are evident among near-retirees aged 50 to 54, with the share planning on retiring before age 60 also decreasing by about 4 percentage points. These patterns are not evident among near-retirees aged 55 to 59.

Overall, these data suggest that Canadians in their late forties and early fifties have pushed back their retirement plans. Evidence from the Labour Force Survey points in

the same direction, as the average retirement age of male employees in the private sector reached a low point of 61.4 in 2000 and subsequently rose to 62.3 years by 2007. Likewise,

the average retirement age of female employees in that sector increased from 60.7 to 61.6 years over that period.²

Table 1 also shows the uncertainty that Canadians in their forties and fifties have about when they intend to retire. In each survey year, about one in four individuals said they either do not intend to retire or don't know when they will retire. Perhaps this is to be expected, given that retirement may be 10, 15 or even 20 years ahead for these individuals and much can happen in the intervening period. The 2007 GSS provides additional information on retirement uncertainty and suggests it may be even more prevalent than Table 1 indicates.

Six in ten near-retirees are certain they will be able to retire when planned

In addition to their planned age of retirement, 2007 GSS respondents were asked whether they're very certain, somewhat certain or not at all certain that they will be able to retire at that age. Most near-retirees

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Table 1 Canadians expect to retire later than they did in the past

Age group	Planned age of retirement				Total
	Before 60	60 to 64	Age 65 or older	Don't intend/ Don't know	
	percentage				
45 to 49 years					
1991	34.3	20.0	20.0	25.7	100.0
2002	32.2	19.5	22.4	26.0	100.0
2007	29.8	21.9	27.4	20.9	100.0
50 to 54 years					
1991	29.4	23.6	22.2	24.8	100.0
2002	26.5	22.6	23.6	27.3	100.0
2007	25.2	27.0	25.4	22.4	100.0
55 to 59 years					
1991	5.5	37.8	30.7	26.1	100.0
2002	9.4	32.9	30.3	27.3	100.0
2007	9.4	33.4	30.9	26.3	100.0

Note: Planned age of retirement for full-year workers (52 weeks) aged 45 to 59, Canada, 1991, 2002 and 2007.
Source: Statistics Canada, 1991 Survey of Ageing and Independence, and General Social Survey, 2002 and 2007.

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What you should know about this study

Data for this paper were drawn from Statistics Canada's 2007 General Social Survey (GSS). The target population for the 2007 GSS was all persons 45 years of age and over residing in Canada, excluding residents of Nunavut, the Yukon and Northwest Territories, and full-time residents of institutions.

The 2007 GSS used a **subjective definition of retirement**. Individuals who said their "main activity" during the previous 12 months was "retired" were identified as retirees, as were individuals who provided a positive response to the question "Have you ever retired from a job or business?" A definition of retirement was not provided.

Our analysis of **near-retirees** is limited to GSS respondents who 1) are aged 45 to 59, 2) have not previously retired and, 3) are either employed or had employment during the 12 months preceding the survey.

Based on GSS results, there were 7.2 million Canadians aged 45 to 59 in 2007. Of these individuals, 80% were either

currently or recently employed at the time of the 2007 GSS and had not previously retired. Virtually all of these individuals (over 99%) answered the GSS questions regarding their retirement plans.

Of the 45- to 59-year-olds excluded from our analysis, about one-quarter were working at the time of the survey, but said they had already retired at least once before (accounting for 4.9% of all 45- to 59-year-olds). Just over one-quarter had retired from the workforce and were no longer working (accounting for 5.6% of all 45- to 59-year-olds). About half were no longer working but said they had never retired—mostly women who left the labour force earlier in life (accounting for 9.7% of all 45- to 59-year-olds). Adjustments have not been made to account for any possible selection bias introduced into our sample by the exclusion of individuals who have already retired. Overall, our sample of 9,241 respondents is representative of approximately 5.7 million non-retired Canadians aged 45 to 59.

express confidence about when they will leave the workforce, with 28% stating a planned retirement age about which they are "very certain" and 33% stating an age about which they are "somewhat certain" (Chart 1).

Altogether, just over 60% of near-retirees are reasonably certain about when they'll leave the workforce. Among the remaining near-retirees who are less sure, about 14% state a planned age of retirement but are "not at all" certain their plans will come to fruition, while the rest either do not know when they'll retire (14%) or don't intend to retire (11%).

Individuals who express certainty regarding their planned retirement age generally expect to leave the workforce sooner than those who are uncertain. For example, of the near-retirees who are "very certain" of their plans, about one-third expect to leave the workforce before age 60; about one-third expect to leave between age 60 and 64; and the final third expect to leave at age 65 or older (Table 2). In contrast, about one-half of near-retirees who are "not at all" certain of their plans expect to work until at least age 65.

Most expect their retirement income to be adequate

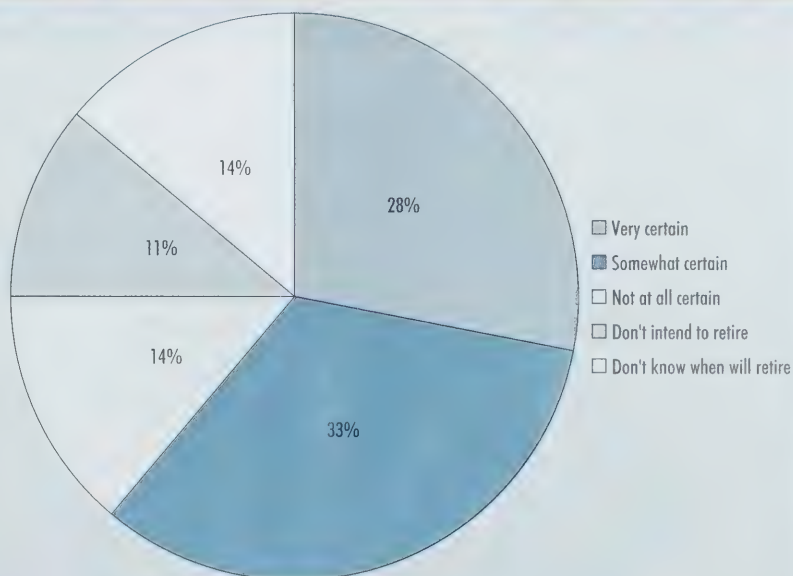
Turning to expectations regarding their financial future, GSS respondents³ were asked how adequate they thought their household income and investments will be to maintain their standard of living when they retire.

Most respondents have a positive outlook, with 62% expecting their retirement income will be "adequate" and another 7% expecting it will be "more than adequate" to maintain their standard of living (Chart 2). Others are less confident, with 19% expecting their retirement income to be "barely adequate" and 9% expecting it to be "inadequate" or "very inadequate". About 3% simply don't know.

Readers are reminded that while these assessments may be informed by careful planning and calculation,

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Chart 1 Certainty about planned age of retirement



Source: Statistics Canada, General Social Survey, 2007.

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Table 2 Near-retirees who are uncertain of their retirement plans expect to retire later

	who plan on retiring ...					
	Before age 60	Age 60 to 64	Age 65	Age 66 or later	Total	Average age
	percentage					years
Certainty regarding planned age of retirement						
Very certain †	33.3	31.0	30.8	4.9	100.0	60.8
Somewhat certain	29.5	36.9*	29.7	3.9	100.0	60.8
Not at all certain	19.3*	31.3	43.0*	6.4	100.0	62.1
Total	29.0*	33.6	32.6	4.7	100.0	61.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Note: Near-retirees aged 45 to 59 years. Excludes near-retirees who don't know when they will retire or who don't intend to retire.

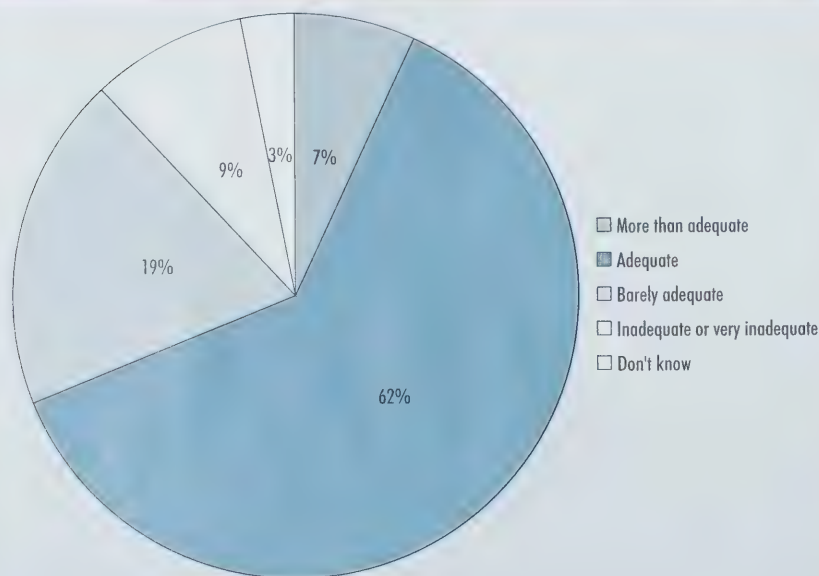
Source: Statistics Canada, General Social Survey, 2007.

they may also be formed in the absence of reliable information and reflect concerns about a financial future that is still many years away. This issue is addressed in more detail in the article "The retirement puzzle: Sorting the pieces"⁴

Expected adequacy of retirement income related to greater certainty of plans

Certainty regarding one's planned age of retirement and positive expectations of one's retirement income are interrelated. Over 90% of near-retirees who expect their

Chart 2 Two thirds of near-retirees expect their retirement income to be adequate or more than adequate to maintain their standard of living



Note: Near-retirees aged 45 to 59. Excludes near-retirees who don't know when they will retire or who don't intend to retire.
Source: Statistics Canada, General Social Survey, 2007.

uncertain about their retirement plans often expect to continue working until age 65 and are often uncertain about their retirement income. Those who are certain of their plans are more likely to expect to retire around age 60 and express confidence in their financial future.

Differences in the retirement outlooks of 45- to 59-year-olds are correlated with a variety of demographic, labour market and financial characteristics. Such relationships can be examined in two ways.

First, the proportions of people in different groups reporting a specific plan or expectation can be compared—for example, the shares of paid employees and self-employed workers planning on retiring before age 60. Comparisons of this sort do not take into account the fact that plans and expectations may be influenced by other characteristics that systematically vary between groups—for example, whether or not individuals have a pension plan. Nonetheless, these comparisons provide a useful overview of differences and encapsulate the varying circumstances of people's lives. These descriptive statistics are presented in Tables A.1 through A.9.

A second approach is to use analytical techniques to "control for" observable characteristics, such as pension coverage, income and health status in order to estimate how much of the observed differences in plans and expectations are attributable to specific characteristics. The results from this approach, based on a series of models, are presented in Tables A.10 through A.12 (See "Multivariate models").

Highlights from both approaches follow.

Men and people without a spouse or partner plan to work longer

There are modest differences in the retirement plans and expectations of women and men. Women are slightly more likely to express uncertainty regarding the timing of

Table 3 Uncertainty expressed when finances are not expected to be adequate

	Certainty regarding planned age of retirement			Total
	Very certain	Somewhat certain	Not at all certain	
	percentage			
Expectations regarding adequacy of retirement income				
Adequate/More than adequate †	46.5	44.3	9.1	100.0
Barely adequate	17.2*	51.1*	31.7*	100.0
Less than adequate	14.6*	28.8*	56.6*	100.0
Total	37.4*	43.9	18.7*	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Note: Near-retirees aged 45 to 59. Excludes near-retirees who don't know when they will retire or who don't intend to retire.

Source: Statistics Canada, General Social Survey, 2007.

retirement income will be adequate or more than adequate to maintain their standard of living are very or somewhat certain of their planned retirement age (Table 3), while this is the case for about 43% of near-

retirees who expect their retirement income will be less than adequate.

Overall, plans and expectations about retirement timing, certainty and income adequacy often cluster together. Individuals who are most

Three outcome variables are used in the multivariate models. First, an ordered probit model is used to identify the factors associated with the likelihood of being very certain, somewhat certain or not at all certain/don't know when one plans to retire. Second, a linear regression model is used to identify the characteristics associated with the planned age of retirement. And third, an ordered probit model is used to identify the factors correlated with the likelihood of expecting one's retirement income to be very adequate or adequate, barely adequate or less than adequate.

These models are run on somewhat different samples of GSS respondents. The first model focusing on certainty excludes the 11% of respondents who said they don't intend to retire. Information is not available to determine if this intention reflects uncertainty about the timing of retirement or a firm plan. The other two models are limited to the 75% of near-retirees who answered the questions about their planned age of retirement and their expectations regarding their retirement income. Individuals who said they don't intend to retire or don't know when they plan on retiring were not asked these questions.

A consistent set of predictor variables is included in the three models. Demographic variables include sex, age, age

squared, marital status, educational attainment, immigration status and health status. Employment characteristics include whether the person is self-employed or not, unionization, job tenure and occupation. Financial characteristics include household income, RRSP contributions in the previous five years and the value of accumulated RRSP assets, and housing tenure. All models are calculated using bootstrap weights to correct variance estimates for survey design.

Results from the multivariate models presented in Tables A.10 and A.12 are shown as "marginal effects" for ease of interpretation. The marginal effects show how the predicted probability of an outcome (e.g. expecting retirement income to be less than adequate, barely adequate or adequate) changes between categories of an independent variable when a specific characteristic is changed by a small amount. For example, the model in Appendix Table 10 predicts, holding all variables at their mean, that 29% of individuals are very certain about their planned age of retirement. It also shows that relationship status is related to certainty about age of retirement. The model predicts that those not in a married/common-law relationship are 4.5 percentage points less likely than those in a relationship to state that they are very certain about their age of retirement.

their retirement as well as concerns regarding the expected adequacy of their retirement savings (Table 4). When other characteristics are taken into account, male-female differences in uncertainty about the timing of retirement remain, but differences in concerns about retirement savings do not. Net of other factors, the model shows that women plan on leaving the workforce almost 9 months earlier than men.⁵

While most Canadians (75%) approaching retirement are married or in a common-law relationship, one in four are not.⁶ Retirement plans and expectations differ across marital status. Individuals without a spouse or partner are less likely than their married or common-law counterparts to be certain about the timing of their retirement (54% and 63% respectively)

and confident in their retirement savings (55% and 72%).

Part of this difference is attributable to lower household incomes among non-married individuals.⁷ Yet even when household income and other characteristics are taken into account, non-married individuals are still less likely than their married/common-law counterparts to express confidence in their retirement plans (a difference of almost 5 percentage points) and in their retirement savings (a difference of over 7 percentage points). Furthermore, non-married individuals plan on retiring almost 7 months later than their married/common-law counterparts, net of other factors.

Immigrants face challenges

Immigrants to Canada, particularly those who arrive as adults, may

face unique challenges preparing for retirement. Their careers and earnings trajectories are often disrupted, reducing their financial capacity to save. Furthermore, the length of time they reside in Canada has implications for Old Age Security eligibility and the contributions they are able to make to public and private pensions. A growing body of research also shows that immigrants who arrived during the 1990s have fared worse in the labour market than immigrants who arrived during the 1970s and 1980s.⁸

The retirement outlooks of immigrants are indeed different from those of persons born in Canada. For example, near-retirees who immigrated since 1990 are far less likely than the Canadian-born to express certainty regarding their

Table 4 Demographic characteristics related to retirement plans of near-retirees

	Certainty about planned age of retirement		Age of retirement		Retirement income
	Don't know or not at all certain	Somewhat or very certain	Plan to retire before 60 years ¹	Plan to retire 65 years or older ¹	Expect income to be adequate ¹
	percentage				
Gender					
Men †	26.0	62.7	28.0	38.3	70.8
Women	30.7*	59.8	30.1	36.3	65.6*
Marital status					
Married/Common-law †	26.7	63.4	30.4	34.7	71.6
Other	33.7*	53.5*	23.6*	47.8*	55.4*
Immigration status					
Canadian-born †	26.5	63.7	31.9	35.2	70.6
Immigrated before 1975	30.7	57.6*	22.1*	37.9	67.3
Immigrated between 1975 and 1989	33.7*	55.5*	19.0*	43.4*	59.3*
Immigrated since 1990	39.9*	44.2*	9.3 ^{†*}	60.3*	50.1*
Self-assessed health					
Excellent †	23.8	65.3	34.1	31.8	78.4
Very good	25.8	64.6	30.1	34.9	70.7*
Good	33.3*	56.4*	23.3*	45.1*	58.4*
Fair or poor	39.1*	46.6*	23.1*	46.0*	49.9*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Percentages are based on respondents who stated a planned age of retirement. Respondents who said they do not intend to retire or don't know when they plan to retire are excluded.

Source: Statistics Canada, General Social Survey, 2007.

retirement plans (44% and 64%), to have confidence in their retirement savings (50% and 71%), and to expect to retire before age 60 (9% and 32%).

Immigrants who arrived during the 1980s have less favourable retirement outlooks than the Canadian born as well. Much of this difference is attributable to the employment and financial characteristics of immigrants. Yet even when these factors are taken into account, immigrants are still less likely than their Canadian-born counterparts to expect their retirement income to be adequate—7 percentage points less for those who arrived in the 1990s and 8 percentage points less for immigrants who arrived between 1975 and 1989.

Those in good health more certain of their retirement plans

Health is an important consideration in retirement transition and is strongly correlated with plans and expectations. While almost two thirds of individuals who rate their health as very good or excellent express certainty regarding the timing of their retirement, this is the case for fewer than half of those who rate their health as fair or poor. Likewise, individuals who report better health have more favourable expectations of their retirement income and are more likely to plan on retiring before age 60, compared with individuals who reported their health as fair or poor.

Substantial differences remain when other factors, such as employment and financial characteristics, are taken into account. For example, compared with near-retirees who

rate their health as excellent, those who rate their health as good, fair or poor are less likely to expect their retirement income to be adequate and to express certainty regarding their planned age of retirement.

Finally, of the near-retirees who state a planned retirement age, about 45% of those in good, fair or poor health plan on working until at least age 65, although many of these individuals are uncertain about the adequacy of their retirement income.

Retirement plans vary considerably across employment characteristics

Retirement plans and expectations are associated with several employment characteristics. Across employment status, the plans and expectations of self-employed workers are markedly different from those of paid employees.

Table 5 Job characteristics related to retirement plans of near-retirees

	Certainty about planned age of retirement		Age of retirement		Retirement income
	Don't know or not at all certain	Somewhat or very certain	Plan to retire before 60 years ¹	Plan to retire 65 years or older ¹	Expect income to be adequate ¹
	percentage				
Class of worker					
Self-employed	33.0*	44.8*	20.0*	47.2*	69.9
Paid employees †	26.7	65.7	30.6	35.6	68.4
Unionization					
Unionized employees	22.1*	73.1*	40.4*	25.1*	71.5*
Non-unionized employees †	30.2	60.3	23.5	43.1	65.7
Job tenure					
Less than 10 years	33.7	53.5	18.7	50.5	60.9
10 to 19 years	27.1*	62.8*	25.1*	35.8*	68.7*
20 or more years	20.1*	72.9*	45.9*	21.5*	77.9*
Pension plan coverage²					
Yes	20.5*	74.7*	38.5*	26.0*	74.1*
No †	35.8	47.6	17.0	51.9	60.4
Industry					
Consumer services ³	33.9*	52.8*	20.5	49.2*	59.3*
Utilities and manufacturing †	23.8	68.1	26.7	37.1	66.5
Public administration	19.5	76.9*	47.3*	18.4*	79.6*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Percentages are based on respondents who stated a planned age of retirement. Respondents who said they do not intend to retire or don't know when they plan to retire are excluded.

2. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are excluded.

3. Include retail trade, food and accommodation, recreation and other services.

Source: Statistics Canada, General Social Survey, 2007.

Quite striking is the fact that almost one in four self-employed individuals (22%) say they do not intend to retire compared with fewer than 1 in 10 paid employees (8%—Table A.2). Among both groups such intentions are most prevalent among individuals with fewer financial resources (Table A.3). Of those self-employed who state a planned age of retirement, almost half (47%) expect to keep working until at least age 65 (Table 5).

Retirement plans and expectations differ across a variety of other employment characteristics as well. For example, compared with unionized employees, non-unionized workers are less likely to plan on retiring before age 60 and to express certainty regarding their plans.⁹

Similarly, certainty regarding plans, confidence in retirement savings and plans to retire before age 60 are all more prevalent among individuals with longer job tenures and among those with an employer-sponsored pension plan.

These findings reflect a variety of interrelated factors. For example, among paid employees aged 45 to 59, union members are about twice as likely as non-members to have a pension plan (at about 90% and 45% respectively). Likewise, length of time in one's job is related to whether one works in a unionized workplace and to the likelihood of having an employer-sponsored pension plan.

Results of models confirm importance of employment characteristics

To disentangle the importance of these factors we turn to the models. The first model predicts that about 29% of near-retirees are very certain of their planned age of retirement (Table A.10).

Those with pension coverage are about 10 percentage points more likely to be certain about their planned age of retirement than those with no pension coverage. As well, employees belonging to a union are about 5 percentage points more likely to be very certain about their planned retirement age than their non-union counterparts. Furthermore, every additional year of job tenure also increases the likelihood of being very certain about one's retirement age.

Findings are similar for expectations regarding retirement income. According to the model in Table A.12, it is predicted that about 73% of near-retirees expect their retirement income to be adequate or more than adequate. Having pension coverage, being in a union, or being in a job longer increase the likelihood that people perceive their income to be adequate.

In terms of planned retirement ages, the second model shows that pension plan members expect to retire about 13 months earlier than non-members, while unionized employees expect to retire about 11 months sooner than their non-unionized counterparts.

Retirement plans and expectations vary by industry

Wages, pension coverage, job tenure, unionization and other characteristics

vary across industries¹⁰ and so do the retirement plans and expectations of individuals in those industries.

Focusing on three industries for illustrative purposes,¹¹ individuals in public administration (i.e. government) are most likely to report being certain of their retirement plans, followed by those in manufacturing and utilities, and then by those in consumer services. And while almost half of individuals in public administration expect to retire before age 60, this is the case for about one-quarter and one-fifth of those in manufacturing and utilities, and in consumer services respectively.

Inter-industry differences in expectations of retirement income are also evident, with 80% of workers in public administration expressing positive expectations compared with 67% of those in manufacturing and utilities and 59% of those in consumer services.

Income and RRSP contributions associated with more certainty regarding retirement plans

Financial preparations are central in retirement decisions and it is not surprising to find strong associations between financial characteristics and plans and expectations. For example, three-quarters of individuals who have contributed to an RRSP in the previous five years and have more than \$100,000 in accumulated RRSP assets express certainty regarding their retirement plans. This is the case for about half of individuals who have not made a recent contribution¹² (Table 6).

RRSP characteristics are also strongly related to planned age of retirement and expectations regarding the adequacy of retirement income. The same patterns are evident across household income and home ownership. For example, 85% of

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Table 6 Savings, income and assets related to retirement plans of near-retirees

	Certainty about planned age of retirement		Age of retirement		Retirement income
	Don't know or not at all certain	Somewhat or very certain	Plan to retire before 60 years ¹	Plan to retire 65 years or older ¹	Expect income to be adequate ¹
percentage					
Contributed to a registered retirement savings plan in the past five years					
No †	36.0	49.3	22.8	48.6	55.7
Yes	24.6*	66.6*	31.2*	33.5*	72.8*
Yes — Assets under \$50,000	29.4*	61.0*	26.4	40.6*	60.7*
Yes — Assets \$50,000 to \$100,000	19.1*	74.2*	34.5*	29.9*	78.6*
Yes — Assets greater than \$100,000	17.9*	74.4*	36.1*	25.7*	87.0*
Household income					
Less than \$40,000 †	39.9	44.2	12.6	62.5	45.0
\$40,000 to \$59,999	35.7	52.1	18.8	46.1*	52.8*
\$60,000 to \$79,999	24.6*	67.4*	29.6*	38.3*	67.4*
\$80,000 to \$99,999	25.6*	64.6*	31.7*	33.4*	69.5*
\$100,000 or more	17.2*	75.1*	38.4*	26.2*	84.9*
Housing tenure					
Rented †	35.6	48.1	16.7	57.4	49.9
Owned with mortgage	28.7*	61.8*	28.3*	38.7*	67.1*
Owned without mortgage	23.5*	67.3*	35.8*	26.9*	77.7*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Percentages are based on respondents who stated a planned age of retirement. Respondents who said they do not intend to retire or don't know when they plan to retire are excluded.

Source: Statistics Canada, General Social Survey, 2007.

near-retirees with household incomes of \$100,000 or more expect their retirement income to be adequate compared with 53% of those with household incomes of \$40,000 to \$60,000. The multivariate models confirm the strength of these relationships.

Retirement from two perspectives

The fact that retirement outlooks are related to characteristics such as health, pension coverage and household income is likely not much of a surprise to most readers. However, the size of the differences across these characteristics—often 20 or 30 percentage points—is an indication of how different the retirement future looks to Canadians in different circumstances. In this respect, the "baby boom generation" is far from homogeneous.

To put a finer point on this, the statistical models are used to estimate how two hypothetical individuals with specific sets of characteristics might view retirement. Unlike the results presented above, the cumulative effects of differences in various characteristics are tallied.

Our hypothetical individuals are both men, 52 years of age, married, and in very good health. Both were born in Canada, both work as technicians, and both own their homes on which they're making mortgage payments.

Here the similarities end. Person no. 1 has worked in the same job for 20 years and belongs to a union. He has a pension plan and also contributes to an RRSP, although his accumulated assets are less than \$50,000. His household income is over \$100,000. Person no. 2 has been in his job for 10 years and does not belong to a union. He does not have a pension, but contributes to an RRSP and has accumulated assets between \$50,000 and \$100,000. His household income is between \$60,000 and \$80,000.

Overall, these hypothetical individuals are not exceptional. Nor are the differences between them large. If we insert their characteristics in our statistical models, what would we expect their retirement plans and expectations to look like? The results are shown in Table 7.

The planned retirement age of Person no. 1 is predicted to be

59 years, while that of Person no. 2 is predicted to be 62 years – an additional 3 years in the workforce. Person no. 1 is fairly sure of his retirement age—a 46% likelihood of being "very certain." Person no. 2 is less sure, with a 29% likelihood of being "very certain." And while Person no. 1 is predicted to be quite confident about his retirement income, with an 81% likelihood of expecting it to be adequate to maintain his standard of living, Person no. 2 is less so, with a 67% likelihood.

Overall, the reasonably modest differences in the employment and financial characteristics of these hypothetical individuals translate into appreciable differences in their retirement outlooks.

Conclusions

The focus of this paper has been on the plans and expectations of Canadians approaching retirement. These must be viewed with a degree of caution given that they are based on the assumptions and best-guesses of survey respondents and may change over time. Nonetheless, there is a close relationship between retirement plans and expectations and characteristics such as health and finances. Retirement plans and expectations also matter as they are likely to influence behaviour.

The prevalence of uncertainty is a strong theme in the results. Many Canadians, particularly those with health concerns or modest financial resources, are unsure about when they will retire. Results from the 2007 GSS show that such uncertainty is more widespread than past surveys indicated.

There is some evidence suggesting that Canadians in their late forties and early fifties have pushed back their planned age of retirement. Nonetheless, age 65 remains an important reference point, with few Canadians saying they plan to work later than that. Whether such expectations will come to fruition cannot be said, but it is worth noting

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Table 7 Retirement outlooks from two perspectives

	Person no. 1 ¹	Person no. 2 ²
	years	
Predicted retirement age	59	62
	percentage	
Likelihood of...		
...being very certain of planned age of retirement	46	29
...expecting retirement income to be adequate or more than adequate	81	67

1. Predicted probabilities assuming a male, aged 52, married, Canadian-born, very good health, home owned with mortgage, union member, pension coverage, 20 years of job tenure, RRSP assets less than \$50,000 and household income of \$100,000 or more.
2. Predicted probabilities assuming a male, aged 52, married, Canadian-born, very good health, home owned with mortgage, non-union, no pension coverage, 10 years of job tenure, RRSP assets of \$50,000 to \$100,000 and household income of \$60,000 to \$80,000.

Source: Statistics Canada, General Social Survey, 2007.

that labour force participation rates among 65- to 69-year-olds have returned to levels not seen since the mid-1970s.

Retirement outlooks are associated with a variety of demographic characteristics. The importance of marital status, and the capacity of a household to put two rather than just one earner in the workforce, is certainly evident in the results. Health too is a critical factor and deserves more detailed analysis in future research.

Much has been said about the deteriorating labour market and financial outcomes of immigrants arriving in Canada during the 1990s and 2000s. Immigrants who were in their early forties when they arrived in the 1990s are now nearing retirement, raising questions about the adequacy of their financial preparations. Results from the 2007 GSS show that their retirement outlooks are far less positive than those of individuals born in Canada.

Retirement expectations across employment and financial characteristics are much as one would expect. The strong relationship between pension coverage and retirement certainty testifies to the confidence that pension members have in their pension plans.

Results from the 2007 GSS indicate that about one-third of near-retirees express concerns about the adequacy of their retirement income. Whether such concerns are justified is beyond the scope of this paper. However, one question it does raise is whether individuals have the information they need to accurately plan and forecast for a retirement future that

may still be many years away? This issue is addressed in the article "The retirement puzzle: Sorting the pieces."¹³



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1. According to the Labour Force Survey, through the 1980s and early 1990s, the share of "older" men participating in the paid labour force declined steadily. Since the mid-1990s, however, this trend has been reversed. For example, after declining from 66% to 43% between 1976 and 1995, the labour force participation rate of men aged 60 to 64 subsequently rebounded to 54%—a gain of 11 percentage points in just over a decade. Similarly, one-in-four men aged 65 to 69 are now in the workforce—a share last seen in the mid-1970s. Increasing participation is also evident among older women. After having been stable at around 24% to 25% for more than twenty years, the labour force participation rate of women aged 60 to 64 increased from 25% to 40% between 1998 and 2007.
2. The average retirement age of men and women in the public sector has remained fairly constant around age 58 to 59 since the mid-1990s.
3. Individuals who do not intend to retire or do not know when they plan to retire were not asked this question. As shown in Table A.3, individuals with lower household incomes, no pension coverage, and no RRSP contributions or accumulated assets were most likely to say they do not intend to retire. Because these individuals were not asked about their expectations regarding the adequacy of their retirement income, the estimates of "barely" and "less than adequate" income in Chart 2 may be underestimated.
4. Schellenberg, G. and Ostrovsky, Y. (2008). 2007 General Social Survey Report: The retirement puzzle: Sorting the pieces. *Canadian Social Trends*, 86. Statistics Canada, Catalogue no. 11-008-XIE.
5. The regression coefficients in Table A.11 are expressed using "years" as the unit of measurement. Because "0.74 years" is not very intuitive, these estimates have been converted into months (i.e. $0.74 \times 12 =$ approximately 9 months) in the text.
6. Among all Canadians aged 45 to 64, three-quarters are married or in a common-law relationship while one-quarter is separated, divorced, widowed or never married (Labour Force Survey, 2007).
7. "Marriage" in this context includes common-law relationships.
8. Picot, G. (2004) The deteriorating economic welfare of Canadian immigrants. *Canadian Journal of Urban Research*. 13(1): 25-46.
9. The 2007 General Social Survey does not include information on the size of the firm in which respondents are employed. Rates of unionization are higher among employees in larger than smaller firms. Consequently, the strength of the correlation between unionization and retirement expectations includes firm size as well as unionization effects.
10. For example, among near-retirees in these three industries (paid employees only), the incidence of unionization is 70% in public administration, 32% in manufacturing and utilities, and 15% in consumer services. The proportions of near-retirees (paid employees only) in these three industries with personal incomes under \$40,000 are 12%, 24% and 54% respectively.
11. Retirement plans and expectations of individuals in all industries are included in the Tables A.2, A.5 and A.8.
12. "Recent" RRSP contributions are defined as within the previous five years.
13. Schellenberg, G. and Ostrovsky, Y. (2008). The retirement puzzle: Sorting the pieces. *Canadian Social Trends*, 86. Statistics Canada, Catalogue no. 11-008-XIE.

Table A.1 Certainty regarding retirement plans of near-retirees, by demographic characteristics, Canada, 2007

	Somewhat/ very certain	Not at all certain/Don't know	Don't intend to retire	Total
	percentage			
Total	61.3	28.2	10.5	100.0
Gender				
Men†	62.7	26.0	11.3	100.0
Women	59.8	30.7*	9.5	100.0
Age group				
45 to 49 years†	61.6	30.0	8.5	100.0
50 to 54 years	61.7	26.8	11.5*	100.0
55 to 59 years	60.3	27.2	12.4*	100.0
Marital status				
Married/Common-law†	63.4	26.7	9.8	100.0
Other	53.5*	33.7*	12.9*	100.0
Education				
High school or less†	58.0	31.3	10.7	100.0
Certificate or diploma from a college or a trade school	62.2*	28.1	9.7	100.0
University degree	65.7*	23.5*	10.8	100.0
Immigration status				
Canadian-born†	63.7	26.5	9.8	100.0
Immigrated before 1975	57.6*	30.7	11.6	100.0
Immigrated between 1975 and 1989	55.5*	33.7*	10.8	100.0
Immigrated since 1990	44.2*	39.9*	15.9*	100.0
Self-assessed health				
Excellent†	65.3	23.8	10.9	100.0
Very good	64.6	25.8	9.6	100.0
Good	56.4*	33.3*	10.3	100.0
Fair or poor	46.6*	39.1*	14.3	100.0
Province of residence				
Newfoundland	65.1	24.3	10.7	100.0
Prince Edward Island	60.8	21.6	17.6	100.0
Nova Scotia	64.7	25.1	10.2	100.0
New Brunswick	65.3*	24.3	10.4	100.0
Quebec	64.4*	26.6	9.0*	100.0
Ontario†	58.7	29.0	12.3	100.0
Manitoba	62.2	26.5	11.4	100.0
Saskatchewan	61.8	29.2	9.0	100.0
Alberta	64.6*	28.0	7.4*	100.0
British Columbia	58.6	31.2	10.2	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Source: Statistics Canada, General Social Survey, 2007.

Table A.2 Certainty regarding retirement plans of near-retirees, by labour force characteristics, Canada, 2007

	Somewhat/ very certain	Not at all certain/Don't know	Don't intend to retire	Total
	percentage			
Class of worker				
Paid employees†	65.7	26.7	7.7	100.0
Self-employed	44.8*	33.0*	22.3*	100.0
Unionization				
Unionized employees	73.1*	22.1*	4.8*	100.0
Non-unionized employees†	60.3	30.2	9.6	100.0
Industry¹				
Primary industries	55.6*	29.9	14.6*	100.0
Construction	51.9*	33.6*	14.6*	100.0
Utilities and manufacturing†	68.1	23.8	8.1	100.0
Distributive services	61.1	29.7	9.2	100.0
Financial services, insurance and real estate	61.2	25.4	13.4*	100.0
Professional and business services	52.1*	31.6*	16.3*	100.0
Consumer services	52.8*	33.9*	13.4*	100.0
Health, education, social services	66.9	25.9	7.2	100.0
Public administration	76.9*	19.5	3.6†	100.0
Occupation				
Management	65.7	22.8	11.4	100.0
Professional	65.9	22.8	11.3	100.0
Technologists and technicians	61.3	28.8	10.0	100.0
Clerical	64.3	29.3	6.4	100.0
Sales and services	55.2	33.7	11.1	100.0
Trades, transportation and equipment operators	58.6	29.8	11.6	100.0
Occupations in primary industries	49.6*	30.5	19.9*	100.0
Occupations in processing, manufacturing and utilities†	63.4	29.3	7.4†	100.0
Job tenure				
Less than 10 years†	53.5	33.7	12.7	100.0
10 to 19 years	62.8*	27.1*	10.1	100.0
20 or more years	72.9*	20.1*	7.0*	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Primary industries include agriculture, forestry, mining and oil and gas.

Distributive services include wholesale trade, transportation and warehousing.

Professional and business services include professional, scientific and technical, management and administrative services.

Consumer services include retail trade, food and accommodation, recreation and other services.

Information and cultural services are included with health, education and social services.

Source: Statistics Canada, General Social Survey, 2007.

	Somewhat/ very certain	Not at all certain/Don't know	Don't intend to retire	Total
	percentage			
Pension coverage				
Yes	74.7*	20.5*	4.8*	100.0
No†	47.6	35.8	16.6	100.0
Inconsistent answers ¹	58.0*	31.0	10.9*	100.0
Contributed to a registered retirement savings plan (RRSP) in the past five years				
No †	49.3	36.0	14.7	100.0
Yes	66.6*	24.6*	8.8*	100.0
Yes — Assets under \$50,000	61.0*	29.4*	9.6*	100.0
Yes — Assets \$50,000 to \$100,000	74.2*	19.1*	6.7*	100.0
Yes — Assets greater than \$100,000	74.4*	17.9*	7.8*	100.0
Yes — Assets not stated	53.1	34.1	12.8	100.0
Pensions and RRSPs				
No pension/No RRSP†	35.7	43.1	21.2	100.0
No pension/Yes RRSP	55.0*	31.0*	14.0*	100.0
Yes pension/No RRSP	69.4*	24.7*	5.9*	100.0
Yes Pension/Yes RRSP	76.5*	19.1*	4.5*	100.0
Inconsistent answers ¹	58.3*	30.7*	11.0*	100.0
Personal income				
Less than \$20,000†	41.6	40.6	17.7	100.0
\$20,000 to \$39,999	53.4*	33.7*	12.9*	100.0
\$40,000 to \$59,999	66.8*	26.0*	7.2*	100.0
\$60,000 to \$79,999	71.9*	21.1*	7.0*	100.0
\$80,000 or more	76.4*	16.1*	7.5*	100.0
Not stated	49.6*	36.4	14.0	100.0
Household income				
Less than \$40,000†	44.2	39.9	15.9	100.0
\$40,000 to \$59,999	52.1*	35.7	12.1	100.0
\$60,000 to \$79,999	67.4*	24.6*	8.0*	100.0
\$80,000 to \$99,999	64.6*	25.6*	9.9*	100.0
\$100,000 or more	75.1*	17.2*	7.6*	100.0
Not stated	50.5*	37.0	12.5	100.0
Housing tenure				
Rented†	48.1	35.6	16.3	100.0
Owned with mortgage	61.8*	28.7*	9.5*	100.0
Owned without mortgage	67.3*	23.5*	9.3*	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Source: Statistics Canada, General Social Survey 2007.

Table A.4 Planned age of retirement of near-retirees, by demographic characteristics, Canada, 2007

	Before age 60	Age 60 to 64	Age 65 or older	Total
	percentage			
Total	29.0	33.6	37.3	100.0
Gender				
Men†	28.0	33.7	38.3	100.0
Women	30.1	33.6	36.3	100.0
Age group				
45 to 49 years†	36.4	27.6	36.0	100.0
50 to 54 years	31.4*	33.7*	35.0	100.0
55 to 59 years	11.7*	44.8*	43.5*	100.0
Marital status				
Married / Common-law†	30.4	34.9	34.7	100.0
Other	23.6*	28.6*	47.8*	100.0
Education				
High school or less†	25.9	34.0	40.1	100.0
Certificate or diploma from a college or a trade school	31.3*	33.8	35.0*	100.0
University degree	31.0*	33.2	35.8	100.0
Immigration status				
Canadian-born†	31.9	32.9	35.2	100.0
Immigrated before 1975	22.1*	40.1*	37.9	100.0
Immigrated between 1975 and 1989	19.0*	37.7	43.4*	100.0
Immigrated since 1990	9.3 ^E *	30.5	60.3*	100.0
Self-assessed health				
Excellent†	34.1	34.1	31.8	100.0
Very good	30.1	35.0	34.9	100.0
Good	23.3*	31.6	45.1*	100.0
Fair or poor	23.1*	30.9	46.0*	100.0
Province of residence				
Newfoundland	36.5*	32.9	30.5*	100.0
Prince Edward Island	21.1 ^E	35.4	43.5	100.0
Nova Scotia	28.5	32.1	39.4	100.0
New Brunswick	33.5	31.9	34.6	100.0
Quebec	33.2*	35.6	31.2*	100.0
Ontario†	26.3	33.3	40.4	100.0
Manitoba	38.6*	32.7	28.7*	100.0
Saskatchewan	30.8	32.1	37.1	100.0
Alberta	26.3	31.6	42.0	100.0
British Columbia	26.3	33.7	40.0	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.5 Planned age of retirement of near-retirees, by labour force characteristics, Canada, 2007

	Before age 60	Age 60 to 64	Age 65 or older	Total
	percentage			
Class of worker				
Paid employees†	30.6	33.8	35.6	100.0
Self-employed	20.0*	32.8	47.2*	100.0
Unionization				
Unionized employees	40.4*	34.4	25.1*	100.0
Non-unionized employees†	23.5	33.4	43.1	100.0
Industry¹				
Primary industries	23.3	36.3	40.3	100.0
Construction	22.0	33.5	44.5	100.0
Utilities and manufacturing†	26.7	36.2	37.1	100.0
Distributive services	28.2	33.3	38.4	100.0
Financial services, insurance and real estate	27.8	36.6	35.6	100.0
Professional and business services	22.0	28.1	49.9*	100.0
Consumer services	20.5	30.2	49.2*	100.0
Health, education, social services	35.4*	34.6	30.0*	100.0
Public administration	47.3*	34.3	18.4*	100.0
Occupation				
Management	33.8*	34.2	32.0*	100.0
Professional	35.5*	32.6	31.9*	100.0
Technologists and technicians	37.6*	31.5	30.9*	100.0
Clerical	29.9*	35.0	35.1*	100.0
Sales and services	22.4	33.5	44.0	100.0
Trades, transportation and equipment operators	23.8	33.1	43.1	100.0
Occupations in primary industries	21.9	35.7	42.4	100.0
Occupations in processing, manufacturing and utilities†	20.0	32.8	47.2	100.0
Job tenure				
Less than 10 years†	18.7	30.8	50.5	100.0
10 to 19 years	25.1*	39.0*	35.8*	100.0
20 or more years	45.9*	32.6	21.5*	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Primary industries include agriculture, forestry, mining and oil and gas.

Distributive services include wholesale trade, transportation and warehousing.

Professional and business services include professional, scientific and technical, management and administrative services.

Consumer services include retail trade, food and accommodation, recreation and other services.

Information and cultural services are included with health, education and social services.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.6 Planned age of retirement of near-retirees, by financial characteristics, Canada, 2007

	Before age 60	Age 60 to 64	Age 65 or older	Total
	percentage			
Pension coverage				
Yes	38.5*	35.4*	26.0*	100.0
No†	17.0	31.2	51.9	100.0
Inconsistent answers ¹	22.4*	32.7	44.9*	100.0
Contributed to a registered retirement savings plan (RRSP) in the past five years				
No †	22.8	28.6	48.6	100.0
Yes	31.2*	35.3*	33.5*	100.0
Yes — Assets under \$50,000	26.4	33.0	40.6*	100.0
Yes — Assets \$50,000 to \$100,000	34.5*	35.6*	29.9*	100.0
Yes — Assets greater than \$100,000	36.1*	38.2*	25.7*	100.0
Yes — Assets not stated	31.2*	37.4*	31.4*	100.0
Pensions and RRSPs				
No pension/No RRSP†	10.0	27.0	62.9	100.0
No pension/Yes RRSP	20.2*	33.1	46.8*	100.0
Yes pension/No RRSP	36.7*	29.8	33.5*	100.0
Yes pension/Yes RRSP	39.0*	36.9*	24.1*	100.0
Inconsistent answers ¹	22.5*	32.4	45.1*	100.0
Personal income				
Less than \$20,000†	18.5	29.5	52.0	100.0
\$20,000 to \$39,999	19.6	32.2	48.2	100.0
\$40,000 to \$59,999	29.4*	34.3	36.3*	100.0
\$60,000 to \$79,999	38.0*	35.0	27.0*	100.0
\$80,000 or more	37.0*	33.1	29.8*	100.0
Not stated	26.0	36.4	37.5*	100.0
Household income				
Less than \$40,000†	12.6	24.8	62.5	100.0
\$40,000 to \$59,999	18.8*	35.0*	46.1*	100.0
\$60,000 to \$79,999	29.6*	32.2*	38.3*	100.0
\$80,000 to \$99,999	31.7*	34.9*	33.4*	100.0
\$100,000 or more	38.4*	35.4*	26.2*	100.0
Not stated	26.5*	34.9*	38.6*	100.0
Housing tenure				
Rented†	16.7	25.9	57.4	100.0
Owned with mortgage	28.3*	33.0*	38.7*	100.0
Owned without mortgage	35.8*	37.3*	26.9*	100.0

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

	More than adequate or adequate	Barely adequate	Inadequate or very inadequate	Don't know	Total
	percentage				
Total	68.3	19.4	9.0	3.3	100.0
Gender					
Men†	70.8	17.9	8.3	3.0	100.0
Women	65.6*	21.1*	9.7	3.6	100.0
Age group					
45 to 49 years†	66.8	20.4	9.6	3.1	100.0
50 to 54 years	69.6	18.2	9.0	3.1	100.0
55 to 59 years	69.0	19.4	7.7	3.9	100.0
Marital status					
Married / Common-law†	71.6	17.9	7.4	3.1	100.0
Other	55.4*	25.2*	15.2*	4.2	100.0
Education					
High school or less†	64.4	20.7	11.1	3.8	100.0
Certificate or diploma from a college or a trade school	65.7	22.3	8.6	3.4	100.0
University degree	76.5*	14.9*	6.3*	2.3 ^E	100.0
Immigration status					
Canadian-born†	70.6	19.2	7.8	2.4	100.0
Immigrated before 1975	67.3	17.8	10.6	4.2 ^F	100.0
Immigrated between 1975 and 1989	59.3*	20.3	13.5*	7.0 ^{E*}	100.0
Immigrated since 1990	50.1*	22.1	18.8*	9.0 ^{E*}	100.0
Self-assessed health					
Excellent†	78.4	14.1	5.6	2.0 ^F	100.0
Very good	70.7*	18.8*	7.9	2.7	100.0
Good	58.4*	24.6*	11.9*	5.1*	100.0
Fair or poor	49.9*	26.0*	18.9*	5.2 ^{E*}	100.0
Province of residence					
Newfoundland	66.5	18.6	10.2	4.6 ^F	100.0
Prince Edward Island	63.2	24.2	x	x	100.0
Nova Scotia	65.5	22.4	x	x	100.0
New Brunswick	64.9	23.1	7.0 ^F	5.0 ^L	100.0
Quebec	68.2	21.6	6.8*	3.5	100.0
Ontario†	67.9	18.8	10.0	3.4	100.0
Manitoba	75.0	15.0	7.5 ^E	2.6 ^E	100.0
Saskatchewan	72.8	18.2	x	x	100.0
Alberta	71.0	16.8	8.8	3.3 ^E	100.0
British Columbia	66.6	19.3	11.1	2.9 ^E	100.0

^E use with cautionx suppressed to meet to confidentiality requirements of the *Statistics Act*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.8 Expected adequacy of retirement income of near-retirees, by labour force characteristics, Canada, 2007

	More than adequate or adequate	Barely adequate	Inadequate or very inadequate	Don't know	Total
	percentage				
Class of worker					
Paid employees†	68.4	19.8	8.8	3.1	100.0
Self-employed	69.9	17.3	8.7	4.0 ^E	100.0
Unionization					
Unionized employees	71.5*	18.6	6.3*	3.6	100.0
Non-unionized employees†	65.7	20.6	10.9	2.8	100.0
Industry¹					
Primary industries	69.3	18.0	7.4 ^E	5.3 ^E	100.0
Construction	66.2	18.6	9.7 ^E	5.4 ^E	100.0
Utilities and manufacturing†	66.5	21.1	9.0	3.4 ^E	100.0
Distributive services	65.5	20.6	11.0	3.0 ^E	100.0
Financial services, insurance and real estate	70.1	20.0	x	x	100.0
Professional and business services	70.3	16.7	9.9	3.1 ^E	100.0
Consumer services	59.3*	24.1	11.7	4.9	100.0
Health, education, social services	71.7	17.8	8.0	2.6	100.0
Public administration	79.6*	14.4*	3.9 ^E	2.1 ^E	100.0
Occupation					
Management	78.9*	14.6*	x	x	100.0
Professional	78.2*	15.4*	5.1*	1.4 ^E	100.0
Technologists and technicians	66.6	20.3	9.4	3.7 ^E	100.0
Clerical	66.5*	20.7	9.8	3.0 ^E	100.0
Sales and services	60.7	22.1	12.2	4.9	100.0
Trades, transportation and equipment operators	62.9	20.7	11.8	4.6 ^E	100.0
Occupations in primary industries	67.9	19.1 ^E	7.8 ^E	5.2 ^E	100.0
Occupations in processing, manufacturing and utilities†	56.9	26.7	10.8 ^E	5.5 ^E	100.0
Job tenure					
Less than 10 years†	60.9	22.2	12.9	4.0	100.0
10 to 19 years	68.7*	20.4	8.1*	2.8	100.0
20 or more years	77.9*	14.8*	4.6*	2.7	100.0

^E use with caution

x suppressed to meet to confidentiality requirements of the *Statistics Act*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Primary industries include agriculture, forestry, mining and oil and gas.

Distributive services include wholesale trade, transportation and warehousing.

Professional and business services include professional, scientific and technical, management and administrative services.

Consumer services include retail trade, food and accommodation, recreation and other services.

Information and cultural services are included with health, education and social services.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.9 Expected adequacy of retirement income of near-retirees, by financial characteristics, Canada, 2007

	More than adequate or adequate	Barely adequate	Inadequate or very inadequate	Don't know	Total
percentage					
Pension coverage					
Yes	74.1*	17.2*	6.0*	2.7*	100.0
No†	60.4	22.6	12.7	4.3	100.0
Inconsistent answers ²	66.4	19.7	11.2	2.7 [‡]	100.0
Contributed to a registered retirement savings plan (RRSP) in the past five years					
No †	55.7	24.2	14.9	5.2	100.0
Yes	72.8*	17.7*	6.9*	2.5*	100.0
Yes — Assets under \$50,000	60.7*	25.2	11.2*	2.9*	100.0
Yes — Assets \$50,000 to \$100,000	78.6*	14.6*	4.9*	1.8 ^{‡*}	100.0
Yes — Assets greater than \$100,000	87.0*	9.9*	1.9 ^{‡*}	1.3 ^{‡*}	100.0
Yes — Assets not stated	74.3*	12.0*	6.4 ^{‡*}	7.3 [‡]	100.0
Pensions and RRSPs					
No pension/No RRSP†	46.5	26.9	20.2	6.4	100.0
No pension/Yes RRSP	67.0*	20.5*	9.3*	3.2*	100.0
Yes pension/No RRSP	63.1*	22.1	10.0*	4.8 [‡]	100.0
Yes Pension/Yes RRSP	77.1*	15.9*	4.9*	2.0*	100.0
Inconsistent answers ²	66.6*	19.8*	10.9*	2.8 ^{‡*}	100.0
Personal income					
Less than \$20,000†	52.7	24.5	19.3	3.5 [‡]	100.0
\$20,000 to \$39,999	56.4	25.1	14.0	4.5	100.0
\$40,000 to \$59,999	65.8*	23.0	8.5*	2.7	100.0
\$60,000 to \$79,999	78.2*	14.1*	6.0*	1.7 [‡]	100.0
\$80,000 or more	83.9*	12.1*	2.7 ^{‡*}	1.3 [‡]	100.0
Not stated	65.9*	17.9	8.8*	7.4	100.0
Household income					
Less than \$40,000†	45.0	29.3	21.4	4.3 [‡]	100.0
\$40,000 to \$59,999	52.8*	29.0	15.0*	3.2 [‡]	100.0
\$60,000 to \$79,999	67.4*	21.7*	8.3*	2.6 [‡]	100.0
\$80,000 to \$99,999	69.5*	20.2*	6.4*	3.9 [‡]	100.0
\$100,000 or more	84.9*	10.8*	3.2*	1.1 ^{‡*}	100.0
Not stated	63.1*	19.4*	10.0*	7.4	100.0
Housing tenure					
Rented†	49.9	27.6	18.0	4.4	100.0
Owned with mortgage	67.1*	20.7*	9.1*	3.1	100.0
Owned without mortgage	77.7*	14.4*	5.1*	2.8	100.0

[‡] use with caution

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Note: Table only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.10 Multivariate results on certainty regarding planned age of retirement of near-retirees, Canada, 2007 — Ordered probit model

	Don't know or not at all certain	Somewhat certain	Very certain
Predicted probability of outcome	30.3	percentage 40.3	29.4
Difference associated with change in...		percentage points	
Age		ns	ns ns
Age squared	ns	ns	ns
Gender			
Men	rg	rg	rg
Women	3.5	ns	- 3.5
Marital status			
Married/Common-law	rg	rg	rg
Other	4.8	ns	- 4.5
Immigration status			
Canadian-born	rg	rg	rg
Immigrated before 1975	5.2	ns	-4.8
Immigrated between 1975 and 1989	5.8	ns	-5.4
Immigrated since 1990	ns	ns	ns
Self-assessed health			
Excellent	rg	rg	rg
Very good	3.0	ns	-3.0
Good	6.4	-0.4	-6.0
Fair or poor	13.2	-2.1	- 11.1
Unionization			
Non-unionized employees	rg	rg	rg
Unionized employees	- 4.8	ns	4.8
Self-employed	4.2	ns	- 3.9
Occupation			
Management	ns	ns	ns
Professional	ns	ns	ns
Technologists and technicians	ns	ns	ns
Clerical	ns	ns	ns
Sales and services	ns	ns	ns
Trades, transportation and equipment operators	ns	ns	ns
Occupations in primary industries	ns	ns	ns
Occupations in processing, manufacturing and utilities	rg	rg	rg
Job tenure	- 0.4	ns	0.4
Pension coverage			
No	rg	rg	rg
Yes	- 10.0	ns	9.9
Inconsistent answers ¹	- 5.6	ns	5.9
Contributed to a registered retirement savings plan (RRSP) in the past five years			
No RRSP contribution [†]	rg	rg	rg
Yes — Assets less than \$50,000	ns	ns	ns
Yes — Assets \$50,000 to \$100,000	-7.7	-0.6	8.3
Yes — Assets greater than \$100,000	-9.7	-0.9	10.6
Yes — Assets not stated	ns	ns	ns

	Don't know or not at all certain	Somewhat certain	Very certain
	percentage points		
Household income			
Less than \$40,000	rg	rg	rg
\$40,000 to \$59,999	ns	ns	ns
\$60,000 to \$79,999	-6.2	ns	6.6
\$80,000 to \$99,999	ns	ns	ns
\$100,000 or more	-8.5	ns	8.8
Not stated	ns	ns	ns
Housing tenure			
Housing rented	rg	rg	rg
Housing owned with mortgage	ns	ns	ns
Housing owned without mortgage	ns	ns	ns
Housing tenure not stated or other	ns	ns	ns

rg Reference group.

ns Not significant.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Note: Percentage point differences in this table are to be interpreted by comparing them to the reference group in each category. For instance, it is predicted that women will be 3.5 percentage points more likely than men to state that they don't know or are not at all certain about their planned age for retiring.

Source: Statistics Canada, General Social Survey, 2007.

	Coefficient		Coefficient
	years		years
Age	-1.73	Pension coverage	
Age squared	1.91	No	rg
Gender		Yes	-1.09
Men	rg	Inconsistent answers ¹	-0.60
Women	-0.74	Contributed to a registered retirement savings plan (RRSP) in the past five years	
Marital status		No	rg
Married/Common-law	rg	Yes — Assets less than \$50,000	ns
Other	0.56	Yes — Assets \$50,000 to \$100,000	ns
Immigration status		Yes — Assets greater than \$100,000	-0.87
Canadian-born	rg	Yes — Assets not stated	ns
Immigrated before 1975	ns	Household income	
Immigrated between 1975 and 1989	ns	Less than \$40,000	rg
Immigrated since 1990	0.69	\$40,000 to \$59,999	ns
Self-assessed health		\$60,000 to \$79,999	-0.70
Excellent	rg	\$80,000 to \$99,999	-0.66
Very good	ns	\$100,000 or more	-1.12
Good	0.33	Not stated	-0.82
Fair or poor	ns	Housing tenure	
Unionization		Housing rented	rg
Non-unionized employees	rg	Housing owned with mortgage	-0.44
Unionized employees	-0.95	Housing owned without mortgage	-1.44
Self-employed	0.48	Housing tenure not stated or other	ns
Occupation			
Management	-0.74		
Professional	ns		
Technologists and technicians	-0.96		
Clerical	ns		
Sales and services	ns		
Trades, transportation and equipment operators	ns		
Occupations in primary industries	ns		
Occupations in processing, manufacturing and utilities	rg		
Additional year of job tenure	-0.10		

rg Reference group.

ns Not significant.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Note: Near-retirees who stated a planned age of retirement only.

Source: Statistics Canada, General Social Survey, 2007.

	Inadequate or very inadequate	Barely adequate	More than adequate or adequate
		percentage	
Predicted probability of outcome	6.4	20.3	73.3
Difference associated with change in...		percentage points	
Age	ns	ns	ns
Age squared	ns	ns	ns
Gender			
Men	rg	rg	rg
Women	ns	ns	ns
Marital status			
Married/Common-law	rg	rg	rg
Other	3.0	4.4	- 7.4
Immigration status			
Canadian-born	rg	rg	rg
Immigrated before 1975	ns	3.3	- 5.5
Immigrated between 1975 and 1989	3.3	4.7	- 8.0
Immigrated since 1990	ns	4.1	- 7.0
Self-assessed health			
Excellent	rg	rg	rg
Very good	2.5	3.9	6.4
Good	5.2	7.4	- 12.6
Fair or poor	9.1	10.0	- 19.1
Unionization			
Non-unionized employees	rg	rg	rg
Unionized employees	- 1.2	- 1.9	3.1
Self-employed	ns	ns	ns
Occupation			
Management	ns	ns	ns
Professional	ns	ns	ns
Technologists and technicians	ns	ns	ns
Clerical	ns	ns	ns
Sales and services	ns	ns	ns
Trades, transportation and equipment operators	ns	ns	ns
Occupationss in primary industries	ns	ns	ns
Occupationss in processing, manufacturing, utilities	rg	rg	rg
Additional year of job tenure	- 0.2	- 0.2	0.4
Pension coverage			
No pension	rg	rg	rg
Yes pension	- 2.6	- 4.2	6.8
Inconsistent answers ¹	- 2.0	- 3.5	5.5
Contributed to a registered retirement savings plan (RRSP) in the past five years			
No	rg	rg	rg
Yes — Assets less than \$50,000	ns	ns	ns
Yes — Assets \$50,000 to \$100,000	- 3.1	- 5.8	8.9
Yes — Assets greater than \$100,000	- 5.3	- 10.5	15.8
Yes — Assets not stated	- 3.8	- 7.9	11.7

Table A.12 Multivariate results on certainty regarding retirement income of near-retirees, Canada, 2007 (continued)

	Inadequate or very inadequate	Barely adequate	More than adequate or adequate
	percentage points		
Household income			
Less than \$40,000	rg	rg	rg
\$40,000 to \$59,999	ns	ns	ns
\$60,000 to \$79,999	-3.1	-5.7	8.8
\$80,000 to \$99,999	-3.2	-6.0	9.2
\$100,000 or more	-6.3	-11.4	17.7
Not stated	-2.0	-3.5	5.5
Housing tenure			
Housing rented	rg	rg	rg
Housing owned with mortgage	ns	ns	ns
Housing owned without mortgage	-2.5	-4.2	6.7
Housing tenure not stated or other	ns	ns	ns

rg Reference group.

ns Not significant.

1. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Notes: Near-retirees who stated a planned age of retirement only. Percentage point differences in this table are to be interpreted by comparing them to the reference group in each category. For instance, it is predicted that non-married individuals will be 3.0 percentage points more likely than married individuals to state that they believe that their retirement income will be inadequate or very inadequate.

Source: Statistics Canada, General Social Survey, 2007.

The retirement puzzle: Sorting the pieces

by Grant Schellenberg and Yuri Ostrovsky

Planning for one's financial future involves resources and skills. Information and data about markets and investments, such as indices, rates of return, currency valuations, and interest rates, surround us every day. In addition to literacy and numeracy skills, which are essential to filter, select, interpret and apply this information, financial management skills are also needed to navigate consumer markets. Mortgages, credit lines, investment accounts, cell phone plans and lease and purchase choices are just some of the products that come with a bewildering variety of options. Technological advances have further altered the financial landscape, with on-line banking and investing perhaps the most obvious examples. In this complex environment, consumers must "...be actively engaged if they are to manage their finances effectively."¹

Do I have enough for retirement? is a question that older workers ask themselves before leaving the workplace. Answering it, however, is not simple. It requires knowledge of public retirement income programs and the benefits they offer, as well as estimates of future income from registered retirement savings plans (RRSPs), pension plans and other savings. Here too the landscape is complex, with pension plans available in a 'bewildering variety of forms.'²

While much attention has been focused on the financial resources of Canadians approaching retirement, much less has been devoted to their 'informational resources.' To what extent do Canadians have the information they need to plan for retirement? Do they understand Canada's public retirement income programs? Do they have a clear sense of the retirement benefits they will receive from their pensions? This article uses data from the 2007 General Social Survey (GSS) to glean insights on the informational resources of non-retired Canadians aged 45 to 59, referred to in the article as near-retirees (See "What you should know about this study" for a complete description).

Financial industry, the top source of retirement advice

Respondents to the 2007 GSS who had not yet retired were asked several questions about financial and retirement information:

- *From whom if anyone do you typically get financial advice, including advice about retirement planning and programs?*
- *How well do you understand public retirement programs such as CPP or QPP or Old Age Security? Is it very well, somewhat or not at all?*

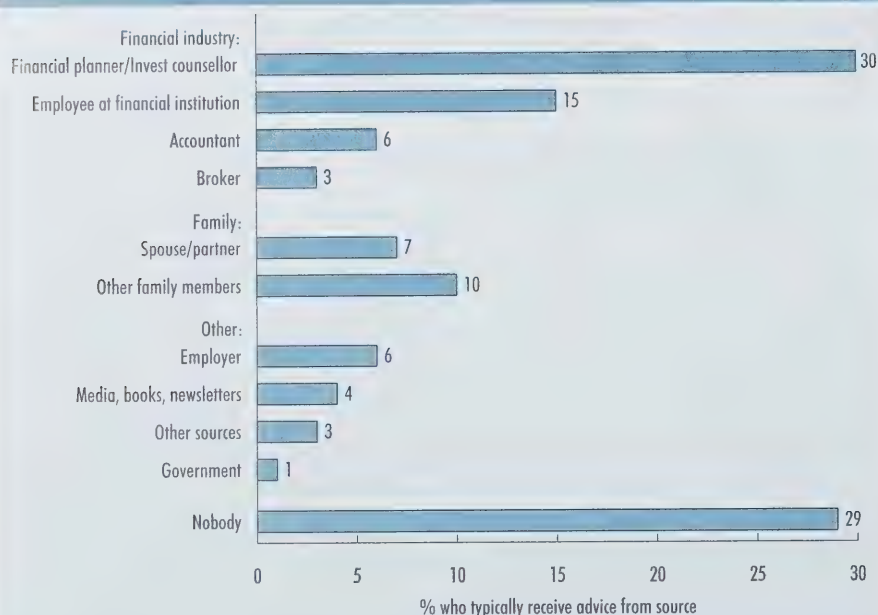
- *During the past 5 years, have you gathered retirement information? For example, talked with a consultant or attended a course?*

Questions were not asked, however, about the quality of the advice received or whether it was acted upon.

Results from the 2007 GSS indicate that most near-retirees (71%) receive financial advice from at least one source. Often—in about half of cases—this comes from the financial industry, with 30% of near-retirees receiving advice from financial planners or investment counsellors, 15% from employees at financial institutions, 6% from accountants and 3% from brokers (Chart 1). About 17% receive financial advice from family members or friends and a further 15% from other sources, including employers, media sources, publications, and federal and provincial governments. Finally, 29% of near-retirees report that they do not typically receive financial advice from any source. Respondents could choose more than one option; thus the total exceeds 100%.

In addition to looking for financial advice, some 45% of near-retirees reported gathering retirement information (i.e., taking a course or talking with a consultant) some time over the previous five years in preparation for retirement.³

Chart 1 Three in ten near-retirees typically receive financial advice from financial planners or investment counsellors



Note: Total exceeds 100% because respondents could identify more than one source.

Source: Statistics Canada, General Social Survey, 2007.

Knowledge of public retirement income programs

Most near-retirees say they have some knowledge of Canada's public retirement income programs, with about one-fifth (19%) saying they understand these programs 'very well' and about one-half (55%) saying they understand them 'somewhat.' However, about one-quarter (25%) of near-retirees report that they do not understand these programs 'at all.'

There is some overlap between the 29% of near-retirees who do not typically receive financial advice and the 25% who do not understand public retirement income programs: 11% of near-retirees neither typically receive advice nor understand 'at all' these programs.

A number of factors are associated with the likelihood of receiving financial advice, understanding public programs and gathering retirement information. These include how close one is to retirement,

What you should know about this study

Data for this paper were drawn from Statistics Canada's 2007 General Social Survey (GSS). The target population for the 2007 GSS was all persons 45 years of age and over residing in Canada, excluding residents of Nunavut, the Yukon and Northwest Territories, and full-time residents of institutions.

The 2007 GSS used a **subjective definition of retirement**. Individuals who said their "main activity" during the previous 12 months was "retired" were identified as retirees, as were individuals who provided a positive response to the question "Have you ever retired from a job or business?" A definition of retirement was not provided.

Our analysis of **near-retirees** is limited to GSS respondents who 1) are aged 45 to 59, 2) have not previously retired and, 3) are either employed or had employment during the 12 months preceding the survey.

Based on GSS results, there were 7.2 million Canadians aged 45 to 59 in 2007. Of these individuals, 80% were either

currently or recently employed at the time of the 2007 GSS and had not previously retired. Virtually all respondents in this group (over 99%) answered the GSS questions regarding their retirement plans.

Of the 45- to 59-year-olds excluded from our analysis, about one-quarter were working at the time of the survey, but said they had already retired at least once before (accounting for 4.9% of all 45- to 59-year-olds). Just over one-quarter had retired from the workforce and were no longer working (accounting for 5.6% of all 45- to 59-year-olds). About half were no longer working but said they had never retired—mostly women who left the labour force earlier in life (accounting for 9.7% of all 45- to 59-year-olds). Adjustments have not been made to account for any possible selection bias introduced into our sample by the exclusion of individuals who have already retired. Overall, our sample of 9,241 respondents is representative of approximately 5.7 million non-retired Canadians aged 45 to 59.

financial resources, employment and demographic characteristics. The relationships between these characteristics and the informational resources of near-retirees are highlighted in Tables A.1 through A.5.

Canadians look for information as they draw closer to retirement

Individuals who are close to retirement, are more likely to seek out retirement-related information. The data show a strong relationship between the number of years until the planned age of retirement and the likelihood of receiving advice or information. For example, 83% of individuals who plan to retire within five years typically receive financial advice from at least one source, while this is the case for 67% of those whose retirement is 15 or more years away (Chart 2). Likewise, those who are closer to retirement are more likely to say they

understand public retirement income programs somewhat or very well and to have gathered information about retirement in general.

However, it is necessary to take financial resources and other characteristics (such as age, employment, income) into account, as these are associated with both the timing of retirement and knowledge about retirement issues. When these factors are accounted for, the relationship between fewer years to retirement and greater likelihood of receiving advice and gathering information generally remains significant, but is somewhat weaker than descriptive statistics indicate (Table A.4).

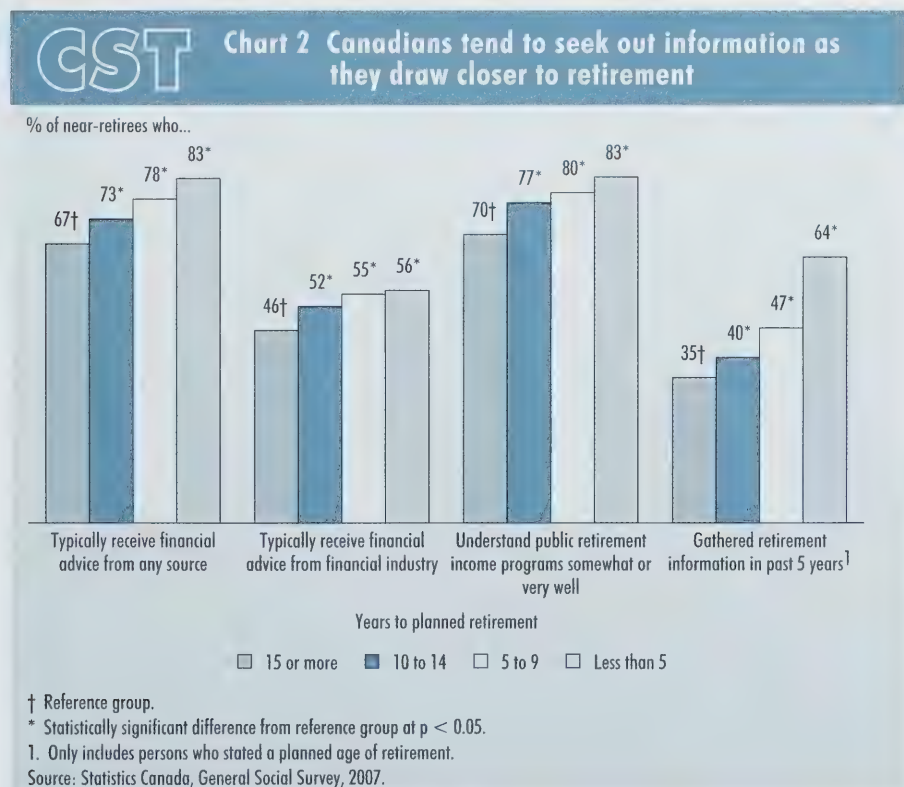
Overall, it appears that individuals tend to search for information as they draw closer to retirement. Whether they leave themselves enough time to act on the advice or information they receive is an important issue, but one for which the GSS does not provide information.

People with more invested in RRSPs are more likely to seek financial and retirement information

Both financial and informational resources are important for a successful retirement, raising the question of how the two are connected. For example, one might expect RRSP contributors to be most likely to obtain financial advice, seeking it out in order to effectively manage their own portfolio or receiving it from the financial agents who manage their accounts. Indeed, the vast majority (88%) of individuals who have contributed to an RRSP in the past five years and have accumulated RRSP assets of over \$100,000 receive financial advice from at least one source (Table A.1). Three-quarters of them receive advice from the financial industry.⁴ In contrast, just over half (52%) of near-retirees who have not recently contributed to an RRSP⁵ receive financial advice from any source, and only about three in ten receive advice from the financial industry.

Similarly, the share of near-retirees who understand public retirement income programs 'somewhat' or 'very well' and the share who have gathered retirement information are both positively associated with RRSP contributions and accumulated assets. The same relationship holds for household income, which is not surprising given that RRSP contributions are related to income.

Again, these differences could also be attributable to other factors. For example, compared with individuals who have lower incomes and few RRSP assets, those with higher incomes and greater assets may be closer to retirement and hence more likely to seek out retirement-related advice and information. When these factors are accounted for, however, the strong and significant association between financial characteristics and informational resources remains. For example, compared with near-retirees who have not recently contributed to



an RRSP, the likelihood of receiving financial advice from any source is 13 percentage points higher among those who have contributed and have accumulated assets under \$50,000 (Table A.4). The difference between non-contributors and contributors with assets of more than \$100,000 is 22 percentage points.⁶ Likewise, even after accounting for the number of years to retirement, a significant relationship remains between informational resources and household income (Chart 3).

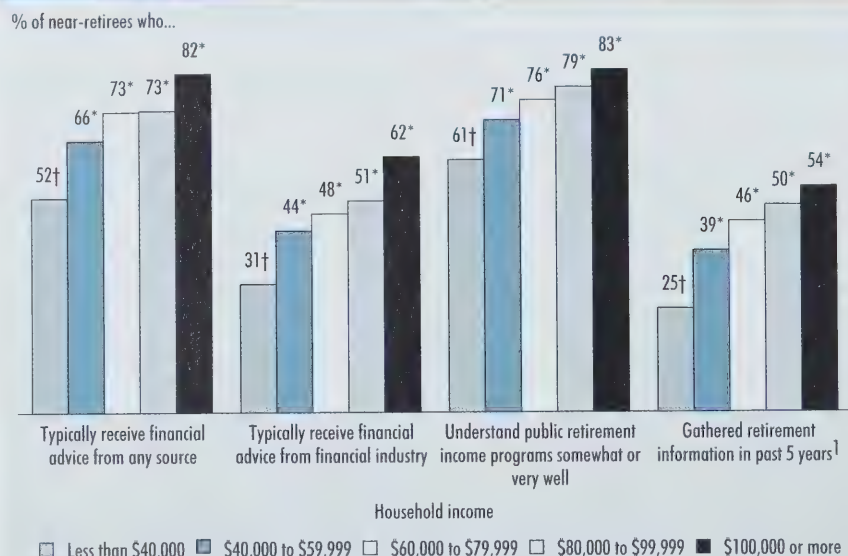
Immigrants less likely to report understanding Canada's public retirement income programs

Knowledge of retirement programs varies widely among individuals of different backgrounds and characteristics. Most notable is the difference in the extent to which immigrants who arrived in Canada since 1990 and their Canadian-born counterparts receive financial advice and information (Table A.2). While almost three-quarters of Canadian-born near-retirees typically receive financial advice from at least one source (73%), this is the case for just half of post-1990 immigrants (50%). Likewise, these immigrants are about half as likely as the Canadian-born to receive financial advice from the financial industry (27% and 53% respectively). Immigrants who arrived since 1990 are also less likely to say they understand Canada's public retirement income programs or to have gathered retirement information. Large differences between these groups remain when other factors, such as household income and RRSP contributions, are taken into account (Table A.4).

Informational resources also vary with other demographic characteristics, such as self-rated health and marital status, although these relationships are at least partly attributable to differences in financial and employment characteristics. An in-depth analysis of the association between informational resources and self-rated health is beyond the scope

CST

Chart 3 Financial and retirement information varies across household income



† Reference group.

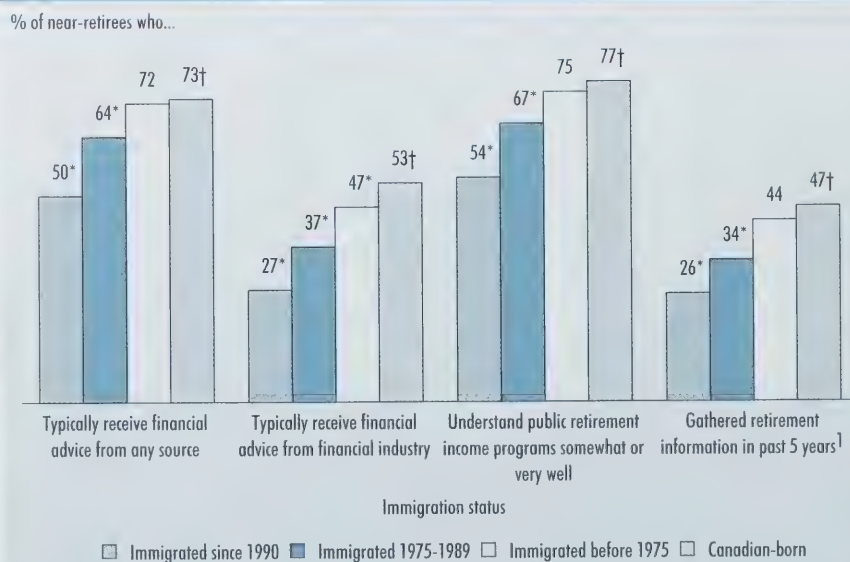
* Statistically significant difference from reference group at $p < 0.05$.

1. Only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

CST

Chart 4 Immigrants less likely to understand Canada's public retirement income programs



† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

of this paper, but further research on the topic is warranted.

Almost one in six pension plan members don't know what type of plan they have

The 2007 GSS also asked respondents if they had a pension plan through their employment and if so, if their pension benefits "...are calculated using a formula (such as 2 percent of your income per year of service) or vary depending on how the pension funds are invested?" Response categories to this question include 1) *calculated using a formula*, 2) *vary depending on how pension funds are invested*, 3) *other* and 4) *don't know*. It is the 'don't know' category which is of particular interest to this analysis.

Accurate information about one's employer-sponsored retirement plan is often considered key to deciding

the timing of retirement, the role personal savings will play and the allocation of one's portfolio between safe and risky investments. Such information is especially important since, unlike many registered pension plans (RPPs), group RRSPs require workers to decide whether to participate and, if so, how much to contribute. An earlier Statistics Canada study found that 4% of full-time permanent employees in the private sector reported having an RPP or group RRSP, but were employed by a firm that provided neither.⁷

Evidence from the 2007 GSS shows that of the near-retirees with pension coverage (paid employees only)⁸,—16%—or almost one in six—do not know what type of plan they have (Table A.5). Across industries, such uncertainty is most prevalent among plan members in

consumer services and professional and business services (at 21%) and least prevalent among those in public administration (12%). Furthermore, uncertainty is most common among employees with fewer years in their jobs and lower annual incomes.

Financially informed Canadians more confident that their retirement income will be adequate

To conclude, an important question is whether the informational resources discussed above have implications for retirement planning and transitions. This is a difficult question to answer given that retirement may still be several years away for GSS respondents in the 45 to 59 age group. However, some insights can be gained by considering near-retirees' expectations about the adequacy of

CST Multivariate models

Three outcome variables are used in the multivariate models. First, logistic regression models are used to identify the factors associated with the likelihood of receiving financial advice from any source, receiving financial advice from the financial industry, and gathering retirement information. Second, an ordered logit model is used to identify the characteristics associated with understanding Canada's public retirement income programs very well, somewhat well or not at all well.

The model pertaining to gathering retirement information is limited to the 75% of near-retirees who answered the questions about their planned age of retirement.

Demographic predictor variables in the model include sex, age, age squared, marital status, educational attainment, immigration status and health status. Employment characteristics include whether the person is self-employed or not, unionization, job tenure and occupation. Financial characteristics include household income, RRSP contributions in the previous five years and the value of accumulated RRSP assets, housing tenure and number of years to planned retirement. All models are calculated using bootstrap weights to correct variance estimates for survey design.

Results from the multivariate models in Table A.4 and Table A.6 are shown as 'marginal effects' for ease of interpretation. The marginal effects show the predicted probability of an outcome (e.g. expecting retirement income to be less than adequate, barely adequate or adequate) between categories of an independent variable. For example, our model shows that if other characteristics are held at their mean values, it is predicted that individuals not living in a married/common-law relationship are 3 percentage points less likely to receive financial advice from at least one source than those living in a married/common-law relationship.

Finally, an ordered logit model is used to identify the factors associated with the likelihood of expecting one's retirement income to be adequate, barely adequate or less than adequate. In addition to the predictor variables listed above, receipt of financial advice, understanding of Canada's public retirement income system and gathering retirement information are also included as predictor variables.

their retirement savings. Specifically, near-retirees were asked:

When you do retire, how adequate do you think your household income and investments will be to maintain your standard of living? Will it be more than adequate, adequate, barely adequate, inadequate or very inadequate?

Most near-retirees (68%) expect their retirement income to be adequate or more than adequate to maintain their standard of living, 19% expect it to be barely adequate, and 9% less than adequate.⁹ But do individuals who receive financial advice, understand public retirement income programs and gather retirement information feel more confident about their financial future than those who do not?

To answer this question, a statistical model was constructed to estimate the relationship between a broad range of variables and expectations of the adequacy of retirement income.¹⁰ Of central interest are the associations between informational resources and these expectations. Results from Table A.6 show how people's knowledge about retirement issues changes their expectations of whether their retirement income will be adequate or not. For example, the model predicts that about 74% of near-retirees expect their retirement income to be adequate or more than adequate.¹¹ Individuals who received financial advice from any source were 7 percentage points more likely to expect their retirement income to be adequate or more than adequate than those who did not receive financial advice.

Broadly speaking, then, financial literacy is associated with an increase in the likelihood of expecting retirement income to be adequate and a decrease in the likelihood of expecting that it will be inadequate.

Conclusion

While much attention is devoted to the financial resources Canadians accumulate en route to retirement, much less is generally said about their informational resources. Results from the 2007 GSS show that about one in three near-retirees do not typically receive financial advice from any source, with this proportion far larger among groups such as lower-income households and recent immigrants. The same holds true for knowledge of public retirement income programs. While most near-retirees say they understand public retirement programs and the basic structure of their pension, a significant proportion do not. Furthermore, individuals who do not receive advice and information regarding retirement express greater uncertainty about their financial future than those who do, even after other characteristics are taken into account. Our data do not make clear whether the absence (or presence) of such information will have significant impacts on the capacity of individuals to make a successful transition into retirement. However, it does appear that some of these near-retirees may be lacking the informational resources needed to navigate a financial marketplace characterized by increasing complexity and sophistication.


Grant Schellenberg is a senior analyst and **Yuri Ostrovsky** is an analyst in Business and Labour Market Analysis Division, Statistics Canada.

1. Braunstein, Sandra and Carolyn Welch (2002). Financial Literacy: An Overview of Practice, Research, and Policy". *Federal Reserve Bulletin* (November).

2. Frenken, Hubert (1995). Pension plan potpourri. *Perspectives on Labour and Income*. (2), 20-27. Statistics Canada, Catalogue no. 75-001-XIE.
3. Only near-retirees who stated a planned age of retirement were asked if they had gathered retirement information in the past five years.
4. The financial industry is defined as financial planners or investment counsellors, employees at financial institutions, accountants and brokers.
5. Throughout this article, 'recent' RRSP contributions are those made within the five years prior to the survey.
6. This is based on the 'marginal effects' of RRSP characteristics when other characteristics in the multivariate model are set to their mean values.
7. Morrisette, René and Zhang, Xullin (2004). Retirement plan awareness. *Perspectives on Labour and Income*, 5(1). Statistics Canada, Catalogue no. 75-001-XIE.
8. This portion of the analysis is restricted to paid employees. Under pension legislation, self-employed operators of unincorporated businesses are not eligible to participate in RPPs. The 2007 GSS does not contain information on whether self-employed respondents operate incorporated or unincorporated businesses.
9. The remaining 3% say they do not know if their retirement income will be adequate. See Schellenberg, G. and Ostrovsky, Y. (2008). The retirement plans and expectations of older workers. *Canadian Social Trends*, 86. Statistics Canada, Catalogue no. 11-008-XIE.
10. The explanatory variables included in the model are gender, marital status, education, immigration status, health status, industry, class of worker and unionization, job tenure, years to planned age of retirement, pension coverage, RRSP contributions and accumulated assets, household income, understanding of public retirement income programs, receipt of financial advice and gathering of retirement information. Two versions of the model were run, one including receipt of financial advice from any source and one including receipt of financial advice from the financial industry.
11. The predicted probabilities are calculated with the independent (or predictor) variables in the model set to their average values.

Table A.1 Informational resources of near-retirees, by financial characteristics, Canada, 2007

	Typically receive financial information from...		Understand public retirement income programs...		Gathered retirement information during past 5 years ¹
	Any source	Financial industry	Not at all	Somewhat or very well	
	percentage				
Total	70.9	49.5	25.3	74.7	44.9
Years to planned retirement					
Less than 5 years	82.8*	56.4*	16.7*	83.3*	64.0*
5 to 9 years	77.7*	55.2*	20.3*	79.7*	47.0*
10 to 14 years	73.1*	52.1*	22.9*	77.1*	39.7
15 years or more †	67.4	46.2	30.3	69.7	35.2
Don't know/Don't intend to retire	58.3*	40.0*	33.6*	66.4*	24.9 ²
Pension coverage					
Yes	75.7*	50.0	21.2*	78.8*	51.3*
No †	66.4	49.5	28.8	71.2	36.4
Inconsistent answers ²	67.9	47.3	29.9	70.1	42.3
Contributed to a registered retirement savings plan (RRSP) in the past five years					
No †	51.7	28.2	34.8	65.2	27.7
Yes	78.9*	58.3*	21.4*	78.6*	51.0*
Yes — Assets under \$50,000	71.4*	45.8*	26.7*	73.3*	42.6*
Yes — Assets \$50,000 to \$100,000	83.7*	64.6*	15.9*	84.1*	56.2*
Yes — Assets higher than \$100,000	88.2*	75.0*	15.4*	84.6*	61.9
Yes — Assets not stated	77.6*	55.7*	26.2*	73.8*	44.4*
Pensions and RRSP					
No pension/No RRSP †	46.4	27.2	37.0	63.0	17.9
No pension/Yes RRSP	78.2*	62.4*	23.8*	76.2*	45.0*
Yes pension/No RRSP	59.5*	29.4	29.7*	70.3*	38.1*
Yes pension/Yes RRSP	80.4*	55.9*	18.8*	81.2*	55.0*
Inconsistent answers ²	68.1*	47.5*	30.0*	70.0*	42.4*
Personal income					
Less than \$20,000 †	58.8	35.8	35.8	64.2	29.0
\$20,000 to \$39,999	62.5	41.8	32.6	67.4	33.9
\$40,000 to \$59,999	73.2*	49.9*	23.4*	76.6*	48.4*
\$60,000 to \$79,999	77.0*	52.8*	19.5*	80.5*	52.6*
\$80,000 or more	81.9*	63.2*	16.7*	83.3*	55.0*
Not stated	68.7*	49.3*	26.8*	73.2*	40.8*
Household income					
Less than \$40,000 †	52.3	30.5	38.6	61.4	24.6
\$40,000 to \$59,999	65.7*	44.0*	29.1*	70.9*	38.9*
\$60,000 to \$79,999	72.6*	47.9*	24.4*	75.6*	45.8*
\$80,000 to \$99,999	73.2*	51.1*	21.5*	78.5*	49.8*
\$100,000 or more	81.7*	61.9*	17.2*	82.8*	54.4*
Not stated	67.0*	46.3*	30.4*	69.6*	39.2*
Housing tenure					
Rented †	54.4	30.1	35.9	64.1	34.8
Owned with mortgage	71.1*	48.2*	25.4*	74.6*	43.4*
Owned without mortgage	78.0*	59.5*	20.3*	79.7*	51.2*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Only includes persons who stated a planned age of retirement.

2. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Source: Statistics Canada, General Social Survey, 2007.

Table A.2 Informational resources of near-retirees, by demographic characteristics, Canada, 2007

	Typically receive financial information from...		Understand public retirement income programs...		Gathered retirement information during past 5 years ¹
	Any source	Financial industry	Not at all	Somewhat or very well	
	percentage				
Total	70.9	49.5	25.3	74.7	44.9
Gender					
Men†	69.1	49.4	23.4	76.6	45.8
Women	72.9*	49.5	27.5*	72.5*	43.9
Age group					
45 to 49 years†	69.8	47.2	27.7	72.3	41.3
50 to 54 years	72.1	52.6*	24.6	75.4	45.3
55 to 59 years	71.1	48.8	22.2*	77.8*	50.9*
Marital status					
Married/Common-law†	72.9	51.6	23.8	76.2	46.2
Other	63.4*	41.4*	30.8*	69.2*	39.8*
Education					
High school or less†	65.7	44.7	29.1	70.9	39.3
Certificate or diploma from a college or a trade school	74.1*	51.8*	24.6*	75.4*	47.7*
University degree	75.0*	53.6*	20.7*	79.3*	49.5*
Immigration status					
Canadian-born†	73.2	52.8	22.9	77.1	47.4
Immigrated before 1975	71.6	47.0*	25.0	75.0	43.8
Immigrated between 1975 and 1989	64.3*	37.2*	33.0*	67.0*	34.2*
Immigrated since 1990	50.0*	26.6*	46.1*	53.9*	25.5*
Self-assessed health					
Excellent†	76.5	57.0	22.3	77.7	49.0
Very good	74.1	52.1*	22.7	77.3	45.6
Good	63.7*	41.8*	29.9*	70.1*	40.1*
Fair or poor	58.5*	35.1*	34.5*	65.5*	42.6
Province of residence					
Newfoundland	55.8*	34.3	22.0	78.0	36.8*
Prince Edward Island	67.7	45.1	24.3	75.7	41.0
Nova Scotia	69.8	49.5	25.8	74.2	48.0
New Brunswick	70.5	45.7	24.8	75.2	45.0
Quebec	68.9	47.7	23.8	76.2	39.7*
Ontario†	72.1	50.2	26.7	73.3	46.0
Manitoba	72.2	49.7	27.3	72.7	45.6
Saskatchewan	72.6	55.9	24.3	75.7	53.1
Alberta	73.1	53.5	23.9	76.1	51.8
British Columbia	70.8	48.7	25.5	74.5	44.9

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Only includes persons who stated a planned age of retirement.

Source: Statistics Canada, General Social Survey, 2007.

Table A.3 Informational resources of near-retirees, by labour market characteristics, Canada, 2007

	Typically receive financial information from...		Understand public retirement income programs...		Gathered retirement information during past 5 years ¹
	Any source	Financial industry	Not at all	Somewhat or very well	
	percentage				
Class of worker					
Paid employees †	71.1	47.8	24.9	75.1	45.6
Self-employed	71.1	57.0*	26.7	73.3	40.7*
Unionization					
Unionized employees	73.0	46.3	22.9*	77.1*	48.6*
Non-unionized employees †	69.7	48.9	26.4	73.6	43.6
Industry²					
Primary industries	68.1	53.7	24.0	76.0	37.8
Construction	62.1	45.9	32.8	67.2	40.1
Utilities and manufacturing †	68.8	46.4	25.5	74.5	45.4
Distributive services	67.8	49.5	27.9	72.1	43.1
Financial services, insurance and real estate	69.6	48.0	20.4	79.6	45.4
Professional and business services	73.7	54.9*	23.2	76.8	43.4
Consumer services	68.0	46.7	30.1	69.9	38.3*
Health, education, social services	76.4*	52.9*	24.5	75.5	48.8
Public administration	76.0*	46.6	15.0*	85.0*	56.5*
Occupation					
Management	77.8*	61.2*	19.7*	80.3*	53.4*
Professional	77.9*	55.5*	18.8*	81.2*	52.1*
Technologists or technicians	76.5*	53.5*	25.9	74.1	51.9*
Clerical	74.7*	51.5*	21.4*	78.6*	48.4*
Sales and services	64.2	42.9	32.3	67.7	36.3
Trades, transportation and equipment operators	63.8	40.0	31.7	68.3	37.6
Occupations in primary industries	64.4	51.2*	24.8	75.2	36.4
Occupations in processing, manufacturing and utilities †	60.3	38.1	31.1	68.9	32.6
Job tenure					
Less than 10 years †	65.5	46.1	30.2	69.8	39.6
10 to 19 years	74.1*	52.5*	23.6*	76.4*	46.9*
20 or more years	77.2*	52.4*	18.9*	81.1*	50.9*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Only includes persons who stated a planned age of retirement.

2. Primary industries include agriculture, forestry, mining and oil and gas.

Distributive services include wholesale trade, transportation and warehousing.

Professional and business services include professional, scientific and technical, management and administrative services.

Consumer services include retail trade, food and accommodation, recreation and other services.

Information and cultural services are included with health, education and social services.

Source: Statistics Canada, General Social Survey, 2007.

Table A.4 Predicted probability of informational resources among the near-retirees by various demographic and employment characteristics, Canada, 2007

	Typically receive financial advice from		Understand public retirement income programs			Gathered retirement information in the past 5 years ¹
	Any source	Financial industry	Not at all	Somewhat	Very well	
Predicted probability of outcome	74.4	49.9	percentage			40.3
Difference associated with change in...			percentage points			
Years to planned retirement						
Less than 5 years	9.2	ns	-3.8	0.4	3.4	22.9
5 to 9 years	4.6	ns	-2.8	0.4	ns	6.1
10 to 14 years	ns	ns	-2.9	0.4	2.6	ns
15 years or more	rg	rg	rg	rg	rg	rg
Don't know / Don't intend to retire	-7.0	-8.7	ns	ns	ns	ns
Age	ns	ns	ns	ns	ns	ns
Age squared	ns	ns	ns	ns	ns	ns
Gender						
Men	rg	rg	rg	rg	rg	rg
Women	5.5	ns	6.2	-1.1	-5.1	-3.2
Marital status						
Married/Common-law	rg	rg	rg	rg	rg	rg
Other	-3.0	ns	ns	ns	ns	ns
Immigration status						
Canadian-born	rg	rg	rg	rg	rg	rg
Immigrated before 1975	ns	-7.0	ns	ns	ns	-5.9
Immigrated between 1975 and 1989	-7.2	-15.6	7.2	-2.2	-4.9	-10.3
Immigrated since 1990	-11.2	-19.0	13.5	-5.5	-8.0	-11.6
Self-assessed health						
Excellent health	rg	rg	rg	rg	rg	rg
Very good health	ns	ns	ns	ns	ns	ns
Good health	-5.6	-6.8	4.9	-1.1	-3.7	ns
Fair or poor health	7.8	-11.1	6.6	-2.0	-4.6	ns
Unionization						
Non-unionized employees	rg	rg	rg	rg	rg	rg
Unionized employees	ns	ns	ns	ns	ns	ns
Self-employed	ns	8.7	ns	ns	ns	ns
Occupation						
Management	7.3	10.3	-5.1	ns	ns	13.5
Professional	7.0	6.8	-6.4	ns	6.0	12.7
Technologists or technicians	9.6	10.8	ns	ns	ns	16.8
Clerical	7.6	9.7	-5.8	ns	5.5	14.3
Sales and services	4.8	ns	ns	ns	ns	8.4
Trades, transportation and equipment operators	5.3	ns	ns	ns	-3.8	ns
Occupations in primary industries	ns	11.8	ns	ns	ns	ns
Occupations in processing, manufacturing and utilities	rg	rg	rg	rg	rg	rg
Additional year of job tenure	ns	0.2	-0.2	0.03	0.1	ns
Housing tenure						
Housing rented	rg	rg	rg	rg	rg	rg
Housing owned with mortgage	ns	8.5	ns	ns	ns	ns
Housing owned without mortgage	5.0	13.1	ns	ns	ns	ns
Housing tenure not stated or other	ns	10.6	ns	ns	ns	ns

	Typically receive financial advice from		Understand public retirement income programs			Gathered retirement information in the past 5 years ¹
	Any source	Financial industry	Not at all	Somewhat	Very well	
percentage points						
Household income						
Less than \$40,000	rg	rg	rg	rg	rg	rg
\$40,000 to \$59,999	3.7	7.9	ns	ns	ns	10.8
\$60,000 to \$79,999	5.3	6.6	-3.7	0.4	3.3	14.0
\$80,000 to \$99,999	ns	7.6	-5.3	ns	5.0	15.7
\$100,000 or more	5.6	8.1	-4.4	0.6	3.8	12.8
Not stated	ns	ns	ns	ns	ns	ns
Pension coverage						
No	rg	rg	rg	rg	rg	rg
Yes	ns	-4.6	ns	ns	ns	7.9
Inconsistent answers ²	ns	ns	3.7	ns	-2.8	5.8
Contributed to a registered retirement savings plan (RRSP) in the last five years						
No	rg	rg	rg	rg	rg	rg
Yes — Assets less than \$50,000	12.5	17.7	ns	ns	ns	13.0
Yes — Assets \$50,000 to \$100,000	18.3	30.6	-6.7	ns	6.5	23.9
Yes — Assets greater than \$100,000	22.1	37.7	-6.4	ns	6.1	28.0
Yes — Assets not stated	16.0	26.6	ns	ns	ns	17.3

rg Reference group.

ns Not significant.

1. Only includes persons who stated a planned age of retirement.

2. About 10% of respondents provided inconsistent answers to the two questions about pension coverage and are treated as a separate category.

Note: Percentage point differences in this table are to be interpreted by comparing them to the reference group in each category. For instance, it is predicted that women will be 5.5 percentage points more likely than men to state that they typically receive financial advice from at least one source.

Source: Statistics Canada, General Social Survey, 2007.

Table A.5 Percentage of members of employer-sponsored pension plans, who report that they don't know what type of pension plan they have, Canada, 2007

	Don't know percentage		Don't know percentage
Total	15.9*	Industry¹	
Gender		Primary industries	14.9 ^E
Men †	11.7	Construction	14.9 ^E
Women	20.3*	Utilities and manufacturing †	15.1
Marital status		Distributive services	15.2
Married/Common-law †	15.0	Financial services, insurance and real estate	14.4
Other	19.1*	Professional and business services	20.8 ^E
Education		Consumer services	20.7
High school or less †	18.3	Health, education, social services	16.9
Certificate or diploma from a college or a trade school	16.4	Public administration	11.5
University degree	12.5*	Unionization	
Immigration status		Unionized employees	16.4
Canadian-born †	13.9	Non-unionized employees †	15.2
Immigrated before 1975	17.3	Job tenure	
Immigrated between 1975 and 1989	27.4*	Less than 10 years †	22.6
Immigrated since 1990	29.8*	10 to 19 years	15.7*
Self-assessed health		20 or more years	10.4*
Excellent †	12.6	Personal income	
Very good	15.1	Less than \$40,000 †	26.8
Good	19.9*	\$40,000 to \$59,999	15.6*
Fair or poor	21.3*	\$60,000 or more	8.2*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

1. Primary industries include agriculture, forestry, mining and oil and gas.

Distributive services include wholesale trade, transportation and warehousing.

Professional and business services include professional, scientific and technical, management and administrative services.

Consumer services include retail trade, food and accommodation, recreation and other services.

Information and cultural services are included with health, education and social services.

Source: Statistics Canada, General Social Survey, 2007.

	Expect retirement income to be...		
	Inadequate or very inadequate	Barely adequate	Adequate or more than adequate
Predicted probability of outcome	6.2	19.4	74.4
Difference associated with change in...		percentage	
Receive financial advice from any source		percentage points	
Yes	-2.3	-4.8	7.1
No	rg	rg	rg
Receive financial advice from financial industry			
Yes	-1.6	-3.6	5.2
No	rg	rg	rg
Understand public retirement programs			
Not at all	rg	rg	rg
Somewhat	-1.9	-4.2	6.1
Very well	-3.7	-9.2	12.9
Gathered retirement information			
Yes	ns	ns	ns
No	rg	rg	rg

rg Reference group.

ns Not significant.

Note: Percentage point differences in this table are to be interpreted by comparing them to the reference group in each category. For instance, it is predicted that those receiving financial advice from any source will be 2.3 percentage points less likely than those not receiving financial advice to state that they expect their retirement income to be inadequate or very inadequate.

Source: Statistics Canada, General Social Survey, 2007.

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Eldercare: What we know today

by Kelly Cranswick and Donna Dosman

Introduction

Gerontologists, health care providers and government have long been attempting to define and better understand caregiving.¹ Statistics Canada's General Social Survey (GSS) first collected data in 1996 on measuring the care provided to Canadians. The focus of that survey was on all care that Canadians provided and received due to temporary difficult times or long-term health problems. According to these data, while the demands and consequences were considerable, Canadians were willing to help family and friends.²

Canada has an aging population with a growing number of seniors (people aged 65 and older) who need support and care. As a result, when data were collected for a second time (2002 GSS), the focus shifted to care provided to seniors. The findings suggested that aging Canadians need assistance, and that family and friends provide help despite growing work and family demands.³ However, while Canadians are willing to help out their family and friends, caregiving duties have consequences that impact caregivers' work, health and family.

Two other factors will likely impact the continued ability of caregivers to provide the care needed to support seniors with a long-term health problem. Firstly, there is the aging of the population, with projections showing that by 2056: the proportion of Canadians 65 years and older

will more than double to over 1 in 4; the proportion of older seniors 80 years and over will triple to about 1 in 10, compared with about 1 in 30 in 2005.⁴

Secondly, baby boomers (people currently between 45 and 60 years of age) are a generation that tended to delay marriage, postpone having children, and have contributed to the increasing participation of women in the workforce. Boomers now live in a world of paid work, caring for children (with more adult children still living at home⁵) and increasingly long-lived parents and friends. The size of the "sandwich generation," the generation caring for children and older parents, is likely to grow.⁶

The aging of the baby boomers will result in a much larger proportion of seniors in the population. With lower fertility rates, there may be fewer adults to care for the elderly. Seniors already provide a significant proportion of care for other seniors. Consequently, the focus of the 2007 General Social Survey was to better understand the caregiving experience of baby boomers and seniors who provide care to our aging population.

Note to readers: This article focuses on caregivers who are 45 years and older. The analysis describes caregivers and their situation. To add to this profile, we include important information about those for whom they provide care. We discuss their primary

care receiver who is 65 and over with a long-term health problem. Because we focus on caregivers, the sample of their primary care receivers is not representative of all care receivers in Canada who are 65 and over, whether living at home or in a care facility. The analysis is representative of caregivers, but not of care receivers.

Using data from the 2007 General Social Survey on Family, Social Support and Retirement, this article looks at Canadians aged 45 and over who provide care to seniors. While it is possible to provide care for a host of reasons and to a multitude of people, this article focuses on care to seniors because of their long-term health problems. Special emphasis is placed on information from Statistics Canada that is available for the first time, such as: whether care was provided to seniors having a physical or mental problem; whether the senior lived in a private household or care facility; and on the support from others that allowed the caregiver to provide care (See "What you should know about this study").

First, the article describes the caregivers. The focus then shifts to the specific tasks caregivers provide. Emphasis is placed on the nature of the care such as care management tasks. The article provides a profile of the seniors receiving this care. We ask how the level and type of support may differ for these seniors in a private versus institutional setting. The

article concludes by asking "how do caregivers manage" and "who helps the caregiver."

Who provides care to seniors?

In 2002, more than two million family and friend caregivers aged 45 years and older, 19% of men and 18% of women in this age group, reported assisting a senior because of the senior's long-term health condition.⁷ In 2007, the number of caregivers aged 45 years and older increased by over 670,000 to 2.7 million caregivers. The proportion of men providing care remained at 19% between 2002 and 2007; however, the proportion of women increased by 4 percentage points to 22%.

In 2007, most eldercare (75%) was provided by those between 45 and 64 years of age.⁸ That also means that 1 in 4 of those providing care to seniors were themselves seniors. Nearly 16% of caregivers were younger seniors aged 65 to 74, and 8% of caregivers were aged 75 and over (Table 1).

Nearly 6 in 10 caregivers were women (57%) and this proportion was higher than the proportion of women aged 45 and over who were not caregivers (51%) (Table 1).

Caregivers have multiple responsibilities. In 2007, nearly 43% of the caregivers were between the ages of 45 and 54, the age at which many Canadians still have children living at home.⁹ About 3 in 4 caregivers were married (refers to married or living common-law). Others also juggled employment with family and eldercare tasks, as more than half of the caregivers (57%) were employed.

The profile of caregivers is different than that of non-caregivers. Caregivers tended to be younger, and were more likely to be women, employed and married than non-caregivers.

Caregiving is not just a family concern

In 2007, nearly 70% of care was provided by close family members (Chart 1). Six in 10 caregivers were

GST

Table 1 The profile of a caregiver differs from a non-caregiver

	Population aged 45 and over	
	Caregivers†	Non-caregivers
	% distribution downward ²	
Age		
45 to 54 years	43	38*
55 to 64 years	32	28*
65 to 74 years	16	18
75 years and over	8	16*
Gender		
Men	43	49*
Women	57	51*
Marital status		
Single	7	6
Married or common-law	76	72*
Widowed	7	11*
Divorced	10	11
Work status		
Working at a paid job	57	51*
Retired	31	34*
Other ¹	12	15*

† Reference group.

* Statistically significant difference between caregivers and non-caregivers (when comparing 99% confidence intervals).

1. Other work status includes such activities as looking for work, going to school, caring for children, household work and long term illness.

2. Due to rounding, totals might not add up to 100.

Source: Statistics Canada, General Social Survey, 2007.

providing care to an aging parent or parent-in-law. Adult children reported four times as often caring for a parent as for a parent-in-law. These statistics need to be viewed in the context of how caregiving is reported, as well as considering the impact of the gender of older seniors receiving this care.

Fewer than 1 in 10 caregivers were providing care to a spouse. Findings from the 1996 GSS suggest that spouses may underreport the care they do provide.¹⁰ Only in certain circumstances is it reported as caregiving. For example, if a husband starts to do laundry because his wife can no longer do it or if the wife starts cutting the grass, the likelihood of calling these tasks "caregiving" increases because the division of labour is now based on health, not "the way we do things." The care provided by a spouse is often high intensity care with the aim of keeping

their partner at home and out of institutional care.¹¹

Caring for senior men can be invisible since many are cared for by their wives, often without the wife reporting it as caregiving. In addition, men often die at a younger age than women from causes such as heart attacks or strokes, with no previous need for care. Women live longer, with more women than men over the age of 74 (61% versus 39%).¹² Thus, women represent a higher percentage of seniors in the older category and they need different kinds and levels of care. When a husband dies, if the wife needs care, it may be reported as caregiving.

It follows that caregivers most commonly reported caring for their mothers (37%). Adult children reported three times as often caring for their mother as for their father.

It is not just close family members who provide care. Roughly one-third of all caregivers were friends (14%), extended family (11%), and neighbours (5%).

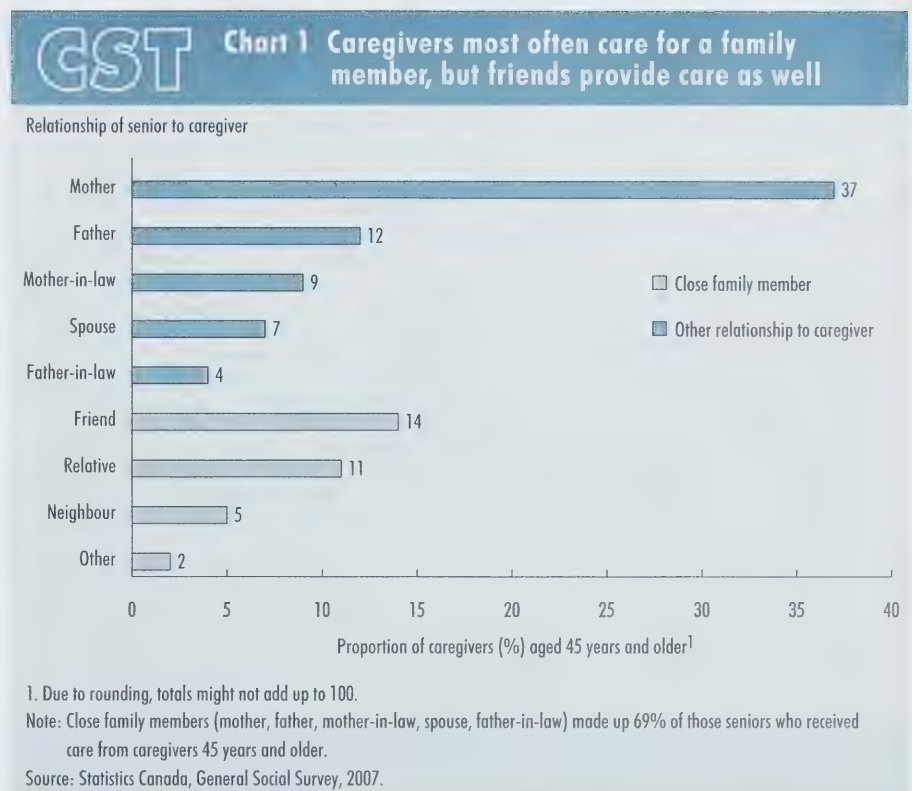
This extended care network may be related to the busy lifestyles of today's families, filled with family and work responsibilities. Some may not always be available to provide eldercare for their parents, or at least not all the care that is needed. Additionally, many seniors have had fewer children than in the past. Children could have moved away from their hometown to pursue a career. Seniors may find themselves with no family in their community when they need assistance. Further research would be needed to explore this subject.

Who performs which tasks and how often?

Caregivers perform a range of tasks in caring for seniors: personal care, tasks inside the senior's house, tasks outside the senior's house, transportation, medical care, and care management (See "What you should know about this study" for definitions of tasks measured in the survey). When examining who performs tasks and how often, it is important to remember that nearly 6 in 10 caregivers were women, and that the proportion of women caregivers was higher than the proportion of women in the general population.

The delivery of care tasks is still divided along gender lines. In 2007, nearly 40% of women caregivers and fewer than 20% of men caregivers provided personal care, which includes intimate activities such as bathing and dressing (Table 2).

Approximately 60% of women caregivers and 30% of their male counterparts performed regular tasks inside the house, such as meal preparation, cleaning or laundry. On the other hand, more men than women provided assistance with tasks outside the house, such as house maintenance or outdoor work. For those who did perform this task,



women were more likely than men to do so at least once a week.

Almost all caregivers, approximately 8 out of 10 men and women, assisted their senior with transportation needs.

While not as many caregivers took on medically related tasks (medical care) associated with the senior's health compared with other tasks, 1 in 4 (25%) women caregivers did, which was nine percentage points more than the men.

Care management involves assistance with scheduling or coordinating caregiving tasks (for example, hiring professional help, managing finances, organizing a care schedule). It can be a time consuming task as one tries to navigate the different service delivery systems. As with medically related tasks, women were more likely than men to assist with care management (42% versus 33%).

Not only are some of the tasks that women perform more personal, they also have to be performed according to a regular schedule—for example

the administering of medicines and the preparation of meals. Other tasks such as care management must be done during the day when offices are open, competing with work time in the case of working caregivers. The time-specific nature of certain tasks is likely to add burden and stress to caregivers. In contrast, tasks outside the house such as house maintenance or outdoor work can usually wait until the care provider has the time to perform them.

A profile of seniors receiving care from caregivers aged 45 years and older

To provide a fuller description of the caregiver's situation, we will look at their primary care receivers' demographic characteristics, reasons for requiring assistance, and type of housing.

Who was the senior to whom the caregiver dedicated the most time and resources because of a long-term health or physical limitation? The GSS found that of the seniors identified as

Table 2 Women and men caregivers differ in type of care they provide to seniors

Type of care	Caregivers 45 years old and over			
	Proportion performing this task		Among those performing this task, proportion who do so at least weekly	
	Women†	Men	Women †	Men
	percentage			
Personal care	37	17*	74	75
Tasks outside the house	33	53*	59	52*
Tasks inside the house	57	32*	73	73
Transportation	80	82*	66	63*
Medical care	25	14*	81	77*
Care management	42	33*	64	62*

† Reference group.

* Statistically significant gender difference (when comparing 99% confidence intervals).

Source: Statistics Canada, General Social Survey, 2007.

Table 3 The need for care because of a mental health problem increases with age

	Reason a primary care receiver gets care ¹	
	Physical health problem only	Mental health / Mental and physical health / Other
	% distribution across ²	
Men		
Age 65 and older	74	26
65 to 74 years	79	22
75 to 84 years	74	26
85 years and over	71*	29*
Women †		
Age 65 and older	72	28
65 to 74 years	79	21
75 to 84 years	74	26
85 years and over	67	34

† Reference group.

* Statistically significant gender difference (when comparing 99% confidence intervals).

1. A primary care receiver is a person 65 years of age or older to whom the caregiver dedicated the most time and resources during the past 12 months because of a long-term health problem or physical limitation.

2. Due to rounding, totals might not add up to 100.

Source: Statistics Canada, General Social Survey, 2007.

the primary care receivers, 7 out of 10 were women. Almost half were 75 to 84 years of age. Care was provided to a large proportion of the oldest seniors—nearly one-quarter of men and 33% of women were 85 years of age and older.

Seniors require assistance for a range of different health reasons. They may be becoming frailer as they age, have a physically debilitating disease or be terminally ill. According to the 2003 Canadian Community

Health Survey (CCHS), "arthritis/rheumatism was the chronic condition most often reported by seniors (47%). Almost 25% reported cataracts or glaucoma and back problems, and 20% said they had been diagnosed with heart disease. Diabetes, a thyroid condition and urinary incontinence were also relatively common, with each affecting at least 1 senior in 10."¹³

Others may have a cognitive disease such as Alzheimer's or dementia requiring 24-hour care for safety reasons. The 2003 CCHS also found that 2% of both men and women who were 65 years of age and older living in private households reported having Alzheimer's or dementia.

In 2007, senior women and men identified as the primary care receivers by the GSS respondents were more likely to receive care because of a "physical problem only." The percentage of those receiving care for a "physical problem only" declined with age (Table 3).

Caregiving is not just provided to seniors living in private homes

The majority of the senior primary care receivers (78%) continued to live in their homes (75% of women care receivers and 83% of men care receivers in 2007); and only one-fifth of them (22%) lived in care facilities (25% of women and 17% of men care receivers).

When a senior moves into a care facility it is often because they have become frailer and require more care than their family and network of friends can provide. In other instances no family members live close enough to the senior to provide the necessary assistance. Care facilities range from assisted living to nursing homes. Institutions provide a varied level of care. In many cases, assistance from family and friends may continue to be required.

Based on what caregivers reported, the women primary care receivers living in care facilities were just

as likely as men to have care from family and friends. Between the ages of 65 and 74 years, only 9% of men and 11% of women who were primary care receivers lived in a care facility (Table 4). These proportions increased to 15% for men and 20% for women in the age group 75 to 84 years. For those 85 years and older, the proportions doubled for both men and women with respectively almost 30% and 40% of men and women in this age group living in care facilities and receiving support from their family and friend care networks.

Caregivers' tasks differ when the primary care receiver lives in a care facility

Caregivers are more likely to provide personal care to seniors living in a care facility than to those still residing in their home. In the 2007 GSS, 34% of their primary care receivers who lived in a care facility received personal care from family and friends (Table 5). This was 7 percentage points more than those seniors receiving care who still resided in their homes.

A senior in a care facility is likely to need medical care. However, more than 1 in 10 family and friend caregivers provided some of this medical care to seniors residing in an institution. This proportion was lower than the number of caregivers who provided medical care to seniors still living in their own homes.

According to what caregivers reported, nearly half of the primary care receivers living in their own homes had their caregiver's assistance with tasks inside the house, such as meal preparation, cleaning or laundry (49%) and tasks outside the house, such as house maintenance or outdoor work (51%).

Nearly 30% of primary care receivers who lived in care facilities still needed assistance with inside tasks. This finding can be explained by the types and level of care provided in care facilities. The care offered is viewed as a spectrum ranging from basic services, to supportive living services such as meals and

Primary care receivers aged 65 and over ²		
	Type of housing	
	Private household	Care facility
% distribution across ³		
Men		
Age 65 and older	83*	17*
65 to 74 years	91*	9*
75 to 84 years	85*	15*
85 years and over	71*	29*
Women †		
Age 65 and older	75	25
65 to 74 years	89	11
75 to 84 years	81	20
85 years and over	61	39

† Reference group.
 * Statistically significant gender difference (when comparing 99% confidence intervals).
 1. These figures include those who have died in the past year as well as those who are still receiving care.
 2. A primary care receiver is a person 65 years of age or older to whom the caregiver dedicated the most time and resources during the past 12 months because of a long-term health problem or physical limitation.
 3. Due to rounding, totals might not add up to 100.
 Source: Statistics Canada, General Social Survey, 2007.

housekeeping, to full nursing. In some cases, as a senior's health fails, the senior may require more services than the facility offers. Family and friends help out.

Sixteen percent of primary care receivers living in care facilities received assistance with tasks outside the house. These seniors may still own homes that family and friends help maintain. The GSS gathers information about seniors in institutions from their caregivers, and no information on home ownership of the care receiver is available.

Approximately 80% of the caregivers, whether primary care receivers lived in their home or a care facility, provided assistance with transportation. This type of care included driving them to medical appointments or taking them shopping. For seniors, these are tasks that become almost impossible to undertake without a driver's license or with limited mobility.

Care responsibilities do not disappear for many family and friend caregivers when the senior moves into a care facility as many caregivers still performed care management activities. When these seniors lived in a care facility, almost one-half of their family and friend caregivers helped out by ensuring that the requisite formal care was in place. About one-third of caregivers of seniors living in their homes arranged appointments and formal care services.

There are several reasons why family and friends may continue to provide care to the primary receiver once they have moved into a care facility. Families often want to maintain some continuity when the senior family member moves into a care facility which can be done through the continuation of care provision by family and friends.¹⁴ In some newer types of facilities such as "assisted living," each additional service comes with an additional cost. Family and friends may choose to assist with some tasks to reduce

Table 5 Tasks performed by caregivers differ depending on the type of housing of the primary care receiver

Tasks	Primary care receivers aged 65 and over ¹	
	Type of housing	
	Private household †	Care facility
	percentage	
Personal care	27	34*
Tasks outside the house	49	16*
Tasks inside the house	51	28*
Transportation	81	82
Medical care	22	15*
Care management	36	45*

† Reference group.

* Statistically significant housing difference (when comparing 99% confidence intervals).

1. A primary care receiver is a person 65 years of age or older to whom the caregiver dedicated the most time and resources during the past 12 months because of a long-term health problem or physical limitation.

Source: Statistics Canada, General Social Survey, 2007.

Only a small percentage of the caregivers (less than 5%) indicated that they were doing not very well or not well at all. The majority of the caregivers who were not coping well were married women. One in three of burdened caregivers had at least one child at home. Nearly all of them were of working age (45 to 64 years old) and over half of them were employed. Two-thirds were caring for a parent. The difficulty coping may be because of the role conflict that occurs, especially for women, as they attempt to manage the many facets of their lives.¹⁷

Who helps the caregiver

Caregivers often have to rely on others for support when they are trying to balance care responsibilities with family and work, or when the amount of care increases to a level beyond that which they can handle.

In the 2007 GSS, respondents were asked if they were provided with help to manage their care responsibilities. They could report more than one source of support (Chart 2).

Over one-third of caregivers (34%), reported that their children provided them with help, such as assisting with household chores. The second most important source of support was from a spouse. Just over 1 in 4 caregivers (26%) were better able to manage because of modifications made by their spouse to life and work arrangements. The next most common source of help was that provided by extended family (24%).

Caregivers also found support outside their families. One in 5 caregivers (19%) relied on close friends or neighbours for help. Next in frequency, 13% of caregivers stated that their community provided support. In addition to community as defined by geographical proximity, community could also refer to their spiritual community, cultural or ethnic group.

In order to accommodate their caregiving duties, 12% of caregivers got support from their local or provincial government. Government

Table 6 In most cases, Canadians are coping with their role as caregiver

	Caregivers 45 years and over		
	Women †	Men	Overall
	% distribution downward ¹		
Coping very well	52	57*	54
Generally managing	42	40	42
Not very well or not well at all	5	3	4

† Reference group.

* Statistically significant gender difference (when comparing 99% confidence intervals).

1. Due to rounding, totals might not add up to 100.

Source: Statistics Canada, General Social Survey, 2007.

the costs.¹⁵ Another factor could be a response to the increase in the patient-to-service provider ratio,¹⁶ which ultimately would impact service levels.

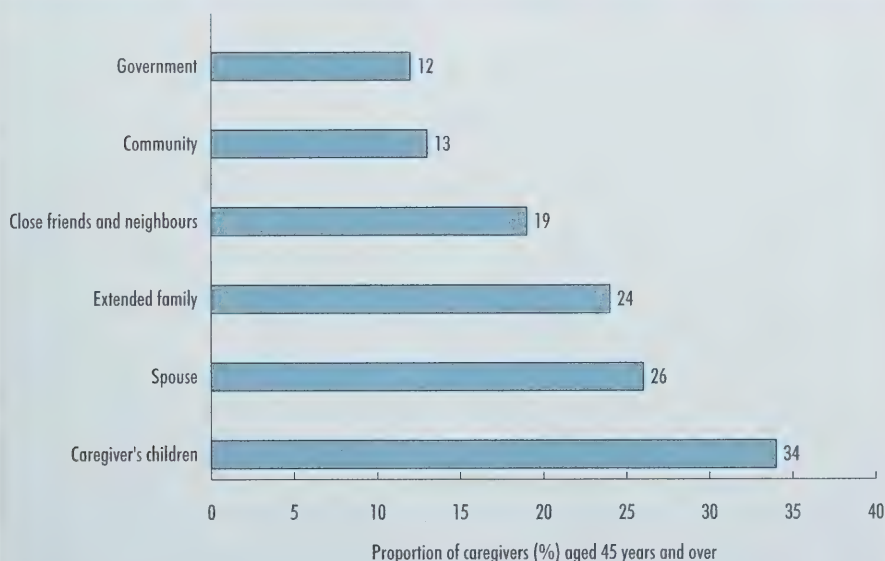
How do caregivers manage?

Caring for a senior can take place over a number of years. In 2007, family and friends between the ages of 45 and 64 years had been providing care for an average of 5.4 years. Caregivers 65 years and older had given assistance for an average of 6.5 years.

Approximately 10% of all caregivers, 45 years and older, had been providing care for at least 13 years. The majority of these long-term caregivers were married women who were of working age and more than half of them were employed. About half of these long-term caregivers were caring for aging parents.

When asked, the vast majority of caregivers said they were coping with their caregiving responsibilities. More than 50% of both men and women were coping very well and more than 40% were generally managing (Table 6).

Sources of support¹



1. Caregivers could report more than one source of support.

Source: Statistics Canada, General Social Survey, 2007.

support could include a social worker's assistance to access formal services (for example, respite care and homecare), or help arranging a senior's move into a care facility.

The only significant gender difference in support was in the area of help from friends. Women got help from their friends more frequently than men did (21% versus 16%).

Summary

This article examined the caregiving experience of baby boomers and seniors. Approximately 1 in 5 Canadians 45 years and older provided care to a senior in 2007.

According to the GSS, caregiving is not just provided to seniors living in their private homes. Some seniors living in care facilities still count on family and friends for care. In 2007, more than 1 in 5 caregivers provided care to seniors living in care facilities.

2007 General Social Survey

Data used in this article come from the 2007 General Social Survey on Family, Social Support and Retirement, which interviewed approximately 23,000 Canadians aged 45 years and older living in private households in the 10 provinces. The survey was developed to better understand the experiences of Canadians 45 years of age and over by examining key transitions related to their families, caregiving and receiving, work and retirement.

The target population of this article is based on a sample of approximately 4,700 respondents 45 years of age and older who identified themselves as a caregiver to a primary care receiver aged 65 or older, and represents over 2.5 million Canadians.

Note to readers: This article focuses on caregivers who are 45 years and older. The analysis describes caregivers and their situation. To add to this profile, we include important information about those for whom they provide care. We discuss their primary care receiver who is 65 and over with a long-term health problem. Because we focus on caregivers, the sample of their primary care receivers is not representative of

all care receivers in Canada who are 65 and over, whether living at home or in a care facility. The analysis is representative of care givers, but not of care receivers.

History of General Social Survey caregiving data

The 1996 GSS collected data from Canadians 15 years and older. The focus was on all care provided to all age groups for a multitude of reasons. The goal was to better understand caregivers and care receivers.

The 2002 GSS collected data from Canadians 45 years and older. While the questions were similar to those asked in 1996, the focus was on care given by those 45 years and older to seniors and the characteristics of those seniors.

In the 2007 GSS, data was again collected from Canadians 45 years and older about the care given to and received by seniors. However, the focus was on the caregiving and care receiving experience with emphasis placed on a caregiver's care history.

One key difference between the three cycles of caregiving data is that in 2007 GSS, the respondents provided information on their primary care receiver. In the previous two cycles, information was collected on all care receivers.

What you should know about this study – continued

However, in these data there is no way to identify which care receiver the caregiver would identify as their primary care receiver. This makes trend analysis on the relationship between the caregiver and their primary care receiver not possible.

Definitions used in this article

Seniors: Refers to persons 65 years of age or older.

Married: Refers to married or living common-law.

Eldercare or care: Unpaid assistance provided to a person 65 years of age or older because of a long-term health condition or physical limitation.

Caregiver: A person who, during the past 12 months, gave assistance to someone with a long-term health condition or physical limitation. This assistance may be for family, friends, neighbours, co-workers or unpaid help provided on behalf of an organization. It excluded paid assistance to clients or patients.

Primary care receiver: A person 65 years of age or older to whom the caregiver dedicated the most time and resources during the past 12 months because of a long-term health or physical limitation.

Transportation and/or banking or bill paying: Assistance with transportation, shopping for groceries or other necessities, banking or bill paying.

Tasks inside the house: Assistance with meal preparation, meal clean-up, house cleaning, laundry or sewing.

Tasks outside the house: Assistance with house maintenance or outdoor work.

Personal care: Assistance with personal care (such as bathing, toileting, care of toenails or fingernails, brushing teeth, shampooing and hair care, or dressing).

Medical care: Assistance with medical treatments or procedures (such as giving injections, performing physiotherapy, changing bandages or dressings, giving medications, changing IV bags, performing blood pressure tests, performing heart monitor tests, assisting with insulin tests, etc).

Care management: Assistance with scheduling or coordinating caregiving tasks (such as hiring, monitoring and dismissing of professional help, managing finances, making appointments, organizing a care schedule, negotiating provision of services, and/or managing health insurance claims).

Care facility: The primary care receiver resided in supportive housing with minimal to moderate support or an institution or care facility (such as hospital or nursing home).

Caregivers tend to be those who already undertake many roles in their lives such as paid worker, parent and spouse in addition to their caregiving tasks. Eldercare tends to be provided by close family members; however, friends and neighbours may in some cases also help out when needed.

Gender differences in the tasks performed still persist and this can cause role conflict, especially for women. However, the article concludes that the majority of Canada's caregivers are coping with their caregiving tasks, reinforced by the support they receive.

Caregiving impacts the caregiver, the senior receiving assistance as well as family, friends and even government, as families and friends strive to find ways to support not only seniors who receive care but the caregivers who provide it.


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Donna Dosman is the Western Region Supervisor of the Research Data Centre Program of Statistics Canada.

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Selected findings of the 2006 Census

by Linda Gionet

Portions of this article have been adapted from *Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations*, 2006 Census (Statistics Canada Catalogue no. 97-558-X). It is available free online at <http://www12.statcan.ca/english/census06/analysis/aboriginal/index.cfm>. Detailed data tables for the Census variables referenced in this article can be accessed free of charge at <http://www.statcan.gc.ca/pub/89-636-x/89-636-x2008001-eng.htm>.

Readers should note that all estimates are based on the Aboriginal identity population.

For definitions of terms, please see **"What you should know about this study"** at the end of this article.

For over 5,000 years, Inuit have inhabited the northern reaches of Canada. In 2006, almost 4% of people who identified themselves as an Aboriginal person – 50,485 – reported that they were Inuit.

The great majority live in the huge area stretching across Canada's North from Labrador to the Northwest Territories, known as Inuit Nunaat, the expression for "Inuit homeland" in the Inuit language. While Inuit share a common culture and traditions, the four regions of Inuit Nunaat are marked by considerable linguistic and geographic diversity.

The largest of these four regions is Nunavut, formed in 1999 from the eastern part of the Northwest Territories. Nearly half (49%) of Inuit in Canada live in Nunavut. Almost one in five Inuit (19%) live in Nunavik, an area comprising 660,000 square kilometres in northern Quebec (Chart 1).

About 6% of the Inuit population resides in the Inuvialuit region, located on almost 91,000 square kilometres in the Northwest Territories. People of this region are known as Inuvialuit, Inuit of the western Arctic. The smallest region in Inuit Nunaat is Nunatsiavut, along the northern coast of Labrador and home to 4% of the Inuit population.

Just over one in five (22%) Inuit did not live in Inuit Nunaat in 2006. Among this group, over three quarters (76%) were settled in urban areas. According to the 2006 Census, the urban centres with the largest Inuit populations were Ottawa-Gatineau (725), Yellowknife (640), Edmonton (590), Montréal (570), and Winnipeg (355). In addition, Iqaluit was the community within Inuit Nunaat with the largest Inuit population, at 3,540.

A young and growing population

The Inuit population grew 26% between 1996 and 2006, three times faster than Canada's non-Aboriginal population (8%). The increase was greatest in Nunavik (25%) and Nunavut (20%), the two most populous regions of Inuit Nunaat.

The higher fertility rate of Inuit women has also contributed to making the Inuit population very young. In 2006, more than one-third (35%) of Inuit were children under the age of 15. Inuit children accounted for almost 40% of the Inuit population in Nunavut and in Nunavik, 30% in Inuvialuit, 27% in Nunatsiavut and 28% outside Inuit Nunaat.

Census data show that the median age of the Inuit population was only

22 years, about half that of the non-Aboriginal population (40 years). Inuit were also younger than First Nations people, whose median age was 25 years, and the Métis, whose median age was 30 years.

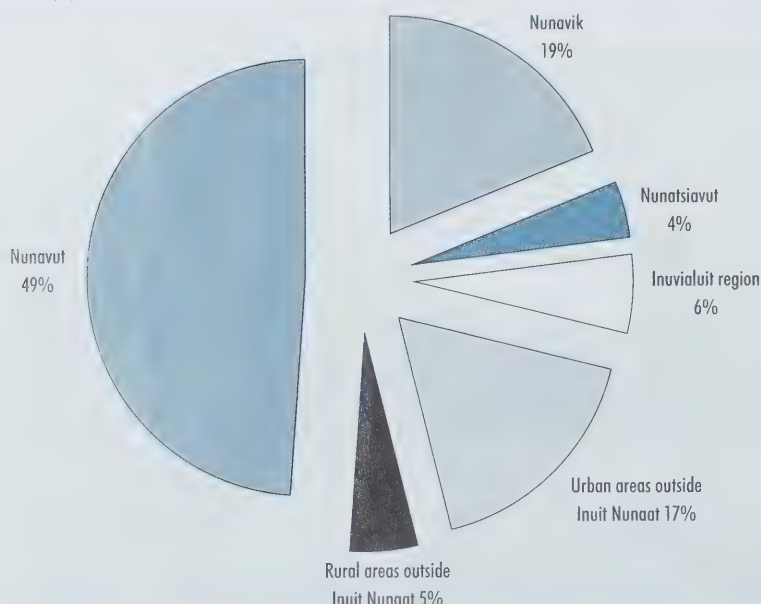
This young, growing Inuit population may create a demand for services such as housing, education and health care for families with children, and skills training for young adults establishing families and seeking work in both the wage and traditional Inuit economies.¹

One-quarter of Inuit children live with a lone parent

In 2006, 69% of Inuit children under age 15 lived in a two-parent family. By comparison, 82% of non-Aboriginal children lived with both parents.

Many Inuit lived in other family arrangements. Some 4,700 children, representing 26% of all Inuit children, lived with a lone parent, most often with their mother. Another 4% lived with a grandparent or other relative, a proportion that may be explained by the practice of traditional or custom adoption among Inuit. Children are sometimes given by their birth parents to a relative to raise as their own, a tradition that has been practised for thousands of years.²

% of total Inuit population



Source: Statistics Canada, Census of Population, 2006.

Within Inuit Nunaat, certain regions had higher proportions of lone-parent families. In the Inuvialuit and Nunavik regions, almost one-third of Inuit children under age 15 lived with a lone parent; in Nunavut and Nunatsiavut, less than one-quarter were in lone-parent families. Outside Inuit Nunaat, Inuit children in census metropolitan areas (CMAs) were twice as likely to live with a lone parent as non-Aboriginal children, at 36% compared with 18%.

About 7 in 10 Inuit have knowledge of the Inuit language

There are five primary dialects collectively known as the Inuit language.³ While some of these dialects have many speakers, others have very few.

In 2006, 69% of the Inuit population in Canada reported having knowledge of the Inuit language. This represents a slight decrease from 72% in 1996.

In Inuit Nunaat, 84% of the Inuit population could converse in the Inuit

language. These figures mask regional variation, however. Knowledge of the Inuit language is almost universal among Inuit in Nunavik (99%) and Nunavut (91%). By contrast, in Nunatsiavut, over one-quarter (27%) of Inuit could speak the language well enough to converse. In the Inuvialuit region, the figure was one-fifth (20%).

Outside Inuit Nunaat, 15% of Inuit spoke the Inuit language. The rate increased to 19% in CMAs.

According to a report published by Inuit Tapiriit Kanatami and Indian and Northern Affairs⁴, overall, "the [Inuit] language remains strong today despite many forces contributing to its erosion."⁵ The report mentions factors such as a limited Inuit language curriculum in the classroom and an ever-growing southern media presence, which "make it more challenging to pass the language from one generation to the next."⁶

Housing in Inuit Nunaat is crowded and in need of major repairs

While Inuit have traditionally lived in multi-family groupings, a number of reports have suggested that the high rate of families sharing a home may be due to the serious shortage of housing in many communities throughout Inuit Nunaat.^{7,8}

In 2006, Inuit were 10 times more likely than the non-Aboriginal population to be living in crowded homes, at 31% compared to 3%. This rate of crowding among Inuit is somewhat reduced from 1996.

Crowding was common in Inuit Nunaat, where just over 15,000 Inuit, or 38% of the total Inuit population, lived in crowded conditions in 2006. In 2006, crowding was much more common in Nunavik (49%) and Nunavut (39%) compared with the Inuvialuit region (19%) and Nunatsiavut (13%). The lower rates in Nunatsiavut may be due to new housing construction funded by the government of Newfoundland and Labrador.⁹

Although 38% of Inuit in Inuit Nunaat were living in crowded conditions, this represented a decline from 43% in 1996.

The state of living conditions is also partly determined by the need for major repairs to the home a family is occupying. In 2006, about 28% of the total Inuit population reported living in a home needing major repairs such as plumbing or electrical work. The figure was 7% for the non-Aboriginal population across Canada.

In Inuit Nunaat, where extreme weather conditions can result in much wear and tear on a house, 31% of Inuit lived in homes that needed major repairs. This was a rise from 19% in 1996. The rate increased during the same period in all regions except Nunatsiavut; it increased by 38 percentage points (to 46%) in Nunavik¹⁰, 5 percentage points (to 28%) in the Inuvialuit region and 5 percentage points (to 26%) in Nunavut. In Nunatsiavut, the proportion of Inuit housing in need of

major repairs declined 7 percentage points to 34% in 2006. This decrease coincides with an increase in housing construction, as noted on the previous page.

Health experts maintain that inadequate housing can be associated with a host of health problems. For instance, hospitalization rates for Inuit children with severe lower respiratory tract infections are the highest in the world, and recent research has shown that crowding, along with poor ventilation, in Inuit homes contributes to these rates.¹¹ Such living conditions can also lead to the transmission of infectious diseases such as tuberculosis¹² and hepatitis A, as well as increase risk for injuries, mental health problems and family tensions.^{13,14}

In 2006, 30% of Inuit in Canada owned their homes. By contrast, 75% of the non-Aboriginal population owned their homes. The rate of homeownership among Inuit varies by region with rates of 65% in Newfoundland and Labrador, 41% in the Northwest Territories, 26% in Nunavut and 9% in Quebec.

More than one-third of the Inuit adult population has a postsecondary qualification

Although half of the Inuit population (51%) aged 25 to 64 years had less than a high school diploma in 2006, 36% had a postsecondary diploma or degree. By comparison, the majority of the non-Aboriginal population (61%) had completed a postsecondary education program. While the importance of informal learning among Inuit cannot be overstated, the focus of this article is the formal education that takes place within the school system.

According to a recent report by Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada, there are many reasons for the lack of formal schooling among the Inuit population.¹⁵ Until the recent past, much learning for Inuit took place on the land in an informal setting. Traditional knowledge and life skills were gained by observing actions,

listening to, and discussing things with elders and other community members.¹⁶ In contrast, many of today's Inuit are exposed to a curriculum developed in the South that may lack cultural relevance. However, some positive Inuit-specific education models do exist.¹⁷

Of the 36% of Inuit adults with postsecondary graduation, most had obtained either a college diploma (17%) or a trades certificate (13%) while 4% had earned a university degree. However, there is a strong geographic component to educational attainment in the Inuit population.

In 2006, almost half (49%) of Inuit adults living outside Inuit Nunaat had a postsecondary education; furthermore, 31% had a college diploma or university degree. In contrast, 32% of adults living in Inuit Nunaat had postsecondary credentials, with 17% of them having college or university.

Even within Inuit Nunaat, levels of educational attainment differed by region. In Nunavut and Nunavik, about a third of the adult population had completed a postsecondary education: 21% of adults in Nunavut had college or university and 10% had a trades certification; in Nunavik the proportions were reversed, at 21% for trades and 8% for college or university. Nunatsiavut (40%) and the Inuvialuit region (35%) had higher rates of postsecondary completion.

Overall, Inuit men and women had similar rates of postsecondary completion. In 2006, 37% of Inuit men aged 25 to 64 had a postsecondary education compared with 36% of adult Inuit women. However, women were more likely than men to have a college or university education – 24% compared with 18% for men – while men were twice as likely to hold a trade certificate, at 18% versus 9% of women.

Some improvement in the labour force, but the gap between the Inuit and the non-Aboriginal population remains

Between 2001 and 2006, the Canada-level employment rate for Inuit adults

aged 25 to 54 rose from 60.3% to 61.2%. Despite this improvement, the gap with non-Aboriginal people remained relatively unchanged: over the same period, employment rose from 80.3% to 81.6% for the non-Aboriginal population of core working age.

In Inuit Nunaat, the employment rate for Inuit actually declined from 60.9% in 2001 to 59.6% in 2006. Rates remained fairly stable in Nunavut, but slid in the other regions, with Nunatsiavut recording the lowest rate, at 45.8% (Chart 2).

By contrast, outside Inuit Nunaat, employment rates for core working-age Inuit adults rose considerably from 58.2% to 66.0%.

Employment rates for men and women in Inuit Nunaat are about the same in most regions, except Nunatsiavut where women have a higher rate (53.1%) than men (39.3%). Outside Inuit Nunaat, the employment rate is higher for men (69.8% versus 63.4%). This gender gap is more reflective of employment rates observed in the non-Aboriginal population, where women are less likely to take part in the labour force.

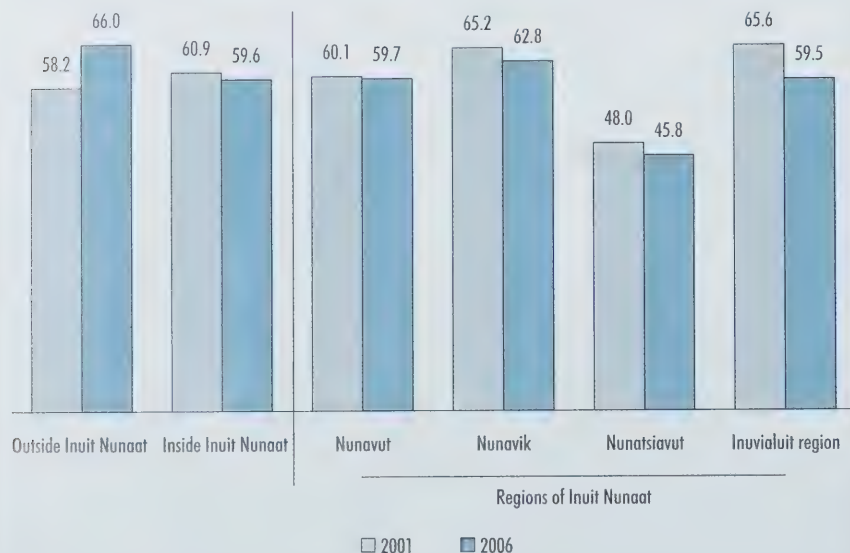
In 2006, the unemployment rate was almost four times higher for Inuit adults of core working age than for their non-Aboriginal counterparts, at 19.0% versus 5.2%. (Unemployment rates measure the proportion of people in the labour force who are looking for work, but cannot find it.)

Within Inuit Nunaat, unemployment rates in Nunavut (19.1%) and Nunavik (18.8%) mirrored the Canada-wide rate for the Inuit population. However, the rates were much higher in Nunatsiavut (33.6%) and the Inuvialuit region (24.6%).

Outside Inuit Nunaat, the unemployment rate for Inuit was lower than the Inuit national average (19.0%), at 14.9% in 2006.

Overall the unemployment rate was higher for Inuit men than for Inuit women – 23.0% compared with 15.1%. The rates within Inuit Nunaat

% of Inuit population aged 25 to 54 employed



Source: Statistics Canada, censuses of population, 2001 and 2006.

were slightly higher than the national average, at 24.4% for men and 16.0% for women. Outside Inuit Nunaat, unemployment rates in 2006 were 18.0% and 12.6%, respectively.

According to Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada, many factors affect the indicators of employment for northern Inuit and these factors are often very different from those in the South.¹⁸ For instance, across northern Canada people are faced with fewer employment opportunities¹⁹ coupled with a weak infrastructure to support industry and housing for employees.²⁰

Income of Inuit is lower than the non-Aboriginal population, particularly in Nunavut

In 2005, the median income of Inuit in Canada was lower than that of the non-Aboriginal population. Specifically, it was about \$9,000 less

than the median income of \$25,955 reported by the non-Aboriginal population. This gap was similar to the gap observed in 2000.

The lower incomes for Inuit, compared with the non-Aboriginal population, are significant when one considers the higher costs of living in the North. Expenses for basic needs such as food, housing, clothing and harvesting supplies are much higher than in the southern parts of Canada.²¹ For example, in most isolated northern communities, it may cost \$350-\$450 a week to provide a nutritious diet for a family of four, compared to about \$200 in the South.²² In addition, the Canadian Arctic is unique in that it is "mixed" with both traditional Inuit and wage economies. The traditional economy contributes to Inuit communities through the harvesting of country food, sewing of clothing and caring for community members.²³

Within Inuit Nunaat, the Inuit median income was lower than for the non-Aboriginal population. In 2005, the Inuit median income (\$16,669) was \$43,378 less than that of the non-Aboriginal population (\$60,047). Outside Inuit Nunaat, the median income was \$17,673. These gaps are similar to those between the median incomes of Inuit and the non-Aboriginal population in 2000.

In Inuit Nunaat, the highest median income (\$18,994) was in Nunavik, while the lowest was in Nunavut (\$15,939). In Nunatsiavut, the figure was \$16,576 and \$16,944 in the Inuvialuit region. Since 2000, all communities within Inuit Nunaat have experienced an increase in median income. The greatest increase occurred in Nunatsiavut where median income rose by \$3,000.

Summary

In 2006, almost 50,500 people identified themselves as Inuit. The large majority – over three-quarters of them – lived in Inuit Nunaat, the traditional Inuit homeland. Inuit are a very young population, with over one-third under the age of 15, and their numbers have grown 26% between 1996 and 2006.

Over two-thirds of the total Inuit population can conduct a conversation in the Inuit language.

Over one-third of Inuit adults have completed a postsecondary education. However, Inuit employment rates remain lower than those for the non-Aboriginal population, especially in Inuit Nunaat. Unemployment is also higher inside Inuit Nunaat than outside.

Aboriginal identity: refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit; and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act* of Canada; and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): is an area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgment of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or was self-employed or worked without pay in a family farm, business or professional practice. Includes those absent from their workplace due to vacation, illness, work disruption or other reason.

Family: a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex. 'Children' in a census family include grandchildren living with their grandparent(s) but with no parents present.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal language.

Income: refers to the total money income received from various sources during calendar year 2005 by persons 15 years of age and over. For a list of total income sources, please refer to *2006 Census Dictionary*. <http://www12.statcan.ca/english/census06/reference/dictionary/pop020a.cfm>

Inuit: persons reporting a single response of "Inuit" to the Aboriginal identity question. Inuit of the western Arctic are

known as Inuvialuit; in this article, the term "Inuit" includes Inuvialuit.

Inuit Nunaat: 'Inuit Nunaat' is the Inuit language expression for 'Inuit homeland', an expanse comprising more than one-third of Canada's land mass, extending from northern Labrador to the Northwest Territories. Inuit have inhabited this vast region, in what is now known as Canada, for 5,000 years. In recent years, four Inuit land claims have been signed across Inuit Nunaat.

While Inuit in each of these regions share a common culture and many traditions, each region is, at the same time, distinct. For example, traditions can sometimes vary and there is much linguistic and geographic diversity from one region (and sometimes from one community within the same region) to the next. The four regions within Inuit Nunaat are: Nunatsiavut, Nunavik, Nunavut and the Inuvialuit region. For more information on these four regions, please refer to *Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census*. Statistics Canada, Catalogue no. 97-558-X: p. 21-22.

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and was available for work, and was looking for employment, was on temporary lay-off, or expected to start work within 4 weeks.

Urban areas: have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

1. Statistics Canada. (2008). *Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census*. Statistics Canada, Catalogue no. 97-558-XIE. Ottawa: Minister of Industry: p. 19.
2. Statistics Canada. (2008): p.27.
3. The five dialects within the Inuit language are: (a) Inuvialuktun, spoken in the Inuvialuit region in the Northwest Territories; (b) Inuinnaqtun (primarily in some communities in western Nunavut); (c) Inuktitut (Eastern Nunavut); (d) Inuktitut (Nunavik); and (e) Inuttut (Nunatsiavut).
4. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007a). *Inuit Social Trends Series: Knowledge and use of Inuktitut among Inuit in Canada, 1981-2001*. Indian and Northern Affairs Canada, Catalogue R2-468/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
5. The report uses the term "Inuktitut" to describe a collection of Inuit dialects. This article, however, uses the term "Inuit language" as Inuktitut does not include all Inuit languages or dialects.
6. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007a): p.2.
7. Pauktuutit Inuit Women of Canada. (2006). *The Inuit Way: A Guide to Inuit Culture*. http://www.pauktuutit.ca/pdf/publications/pauktuutit/InuitWay_e.pdf.
8. Four Worlds Centre for Development Learning. (November 2007). *You Just Blink and it Can Happen: A Study of Women's Homelessness North of 60, Pan-Territorial Report*. Four Worlds Centre for Development Learning, Qullit Nunavut Status of Women Council, YWCA Yellowknife, Yellowknife Women's Society, Yukon Status of Women's Council.
9. In 2000, \$7.7 million was allocated for the construction of new housing units and major repairs to existing housing stock through the Northern Coastal Labrador Strategic Initiative.
10. According to the 2006 Census, four-fifths of Nunavik's housing stock was over 15 years of age. This represents an increase of 10 percentage points from 1996.
11. Kovesi, T., Gilbert, N., Stocco, C., Fugler, D., Dales, R., Guay, M. and Miller, J.D. (2007). Indoor air quality and the risk of lower respiratory tract infections in young Canadian Inuit children. *Canadian Medical Association Journal*, 177 (2).
12. In 2003, the tuberculosis rate for Inuit was more than 10 times higher than that for the total Canadian population. Public Health Agency of Canada. (2003.) *Tuberculosis in Canada*. Public Health Agency of Canada, Catalogue no. HP37-5/2003. Ottawa: Public Health Agency of Canada.
13. Statistics Canada. (2003). *Aboriginal Peoples Survey 2001 – Initial Findings: Well-being of the Non-reserve Aboriginal Population*. Statistics Canada, Catalogue no. 89-589-XIE. Ottawa: Minister of Industry.
14. Health Canada. (1999). *A Second Diagnostic on the Health of First Nations and Inuit People in Canada*. Ottawa: Health Canada.
15. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007b). *Inuit Social Trends Series: Gains made by Inuit in formal education and school attendance, 1981-2001*, Indian and Northern Affairs Canada, Catalogue R2-452/2006E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
16. National Inuit Youth Council. (2005). *Inuit Youth and Education*. <http://tapirisat.ca/inuit-youth/niyc-education.html>.
17. The James Bay and Northern Québec Agreement (Gouvernement du Québec et Hydro-Québec) created the Kativik School Board in 1975 to serve the people living in the 14 communities of Nunavik and to lead to greater Inuit control over formal education. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007b).
18. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007c). *Inuit Social Trends Series: Employment, Industry and Occupations of Inuit in Canada, 1981-2001*, Indian and Northern Affairs Canada, Catalogue R2-455/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
19. Pricewaterhouse Coopers LLP. (2003). *The Cost of Not Successfully Implementing. Article 23: Representative Employment for Inuit within the Government*. <http://tunnigavik.com/publications>.
20. The Conference Board of Canada. (2002). *2002 Nunavut Economic Outlook: An Examination of the Nunavut Economy*. Ottawa: The Conference Board of Canada. Prepared for the Nunavut Economic Development Strategy.
21. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007d). *Inuit Social Trends Series: Levels and Sources of Individual and Household Level Income for Inuit in Canada, 1980-2000*. Indian and Northern Affairs Canada, Catalogue R2-461/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
22. Indian and Northern Affairs Canada. (2008). *Revised Northern Food Basket – Highlights of Price Survey Results for 2006-2007*. <http://www.ainc-inac.gc.ca/pa/nap/air/hpsr0607-eng.asp>
23. In this article, attention is focused solely on cash income measures from the census. However, readers should bear in mind that throughout much of the North, the economic and cultural benefits of hunting, fishing, gathering, sewing activities and so on are significant and not always captured through these indicators. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007d).

Selected findings of the Aboriginal Children's Survey 2006: Family and Community

by Vivian O'Donnell

This article has been adapted from Aboriginal Children's Survey 2006: Family, Community and Child Care (Statistics Canada Catalogue no. 89-634-X). It is available free online at: www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=89-634-x&lang=eng.

"Children hold a special place in Aboriginal cultures. According to tradition, they are gifts from the spirit world They carry within them the gifts that manifest themselves as they become teachers, mothers, hunters, councilors, artisans and visionaries. They renew the strength of the family, clan and village and make the elders young again with their joyful presence." (Royal Commission on Aboriginal Peoples, 1996)

The Aboriginal population is growing at a rate that outpaces that of the rest of the Canadian population. Aboriginal children account for a growing proportion of all children in Canada, particularly in some western provinces and in the Territories. According to the 2006 Census, there were approximately 7,000 Inuit, 35,000 Métis and 47,000 off-reserve First Nations children under the age of 6 across Canada.¹

This brief analysis is designed to offer a starting point to understanding the circumstances under which Aboriginal children are living and growing.

First Nations children living off reserve

Family

In 2006, the Census enumerated about 47,000 First Nations children under the age of 6 years living off reserve in Canada.² The majority (78%) of these

children lived in urban areas, with 46% in census metropolitan areas (CMAs) and 32% in smaller urban centres.³ The remaining 22% were living in rural areas. About two-thirds (67%) of First Nations children living off reserve were Registered or Treaty Indians. (See "What you should know about this study" for a discussion of Registered Indian status.)

While large families are becoming less common in Canada, this is not the case for some First Nations families living off reserve. About 17% of young First Nations children were living in families with four or more children, compared to 8% of non-Aboriginal children. Among off-reserve First Nations children, those with registered Indian status were almost twice as likely to live in big families (20%), compared to those without registered status (12%).

According to the 2006 Census, 52% of off-reserve First Nations children were living with two parents, 41% in

lone parent households, about 8% in multiple-generation households (children, parents and grandparents) and 2% were living with their grandparents only (without parents present).

The parent or guardian responded to the Aboriginal Children's Survey (ACS). For the majority of First Nations children (89%), this person was the birth mother or father. The remaining 11% included grandparents (4%), foster parents (3%), and adoptive parents (2%).

According to the 2006 ACS, parents/guardians of 90% of First Nations children reported that many people were involved in raising the child. Mothers were most commonly involved (93% of children) followed by fathers (72%) and grandparents (44%). More than one-quarter (28%) of First Nations children had relatives (such as siblings, cousins, aunts and uncles) who were playing a part in raising them (Table 1).

The Aboriginal Children's Survey

The Aboriginal Children's Survey (ACS) provides an extensive set of data about Aboriginal (Métis, Inuit, and off-reserve First Nations) children under 6 years of age in urban, rural, and northern locations across Canada. The survey was developed by Statistics Canada and Aboriginal advisors from across the country and was conducted jointly with Human Resources and Social Development Canada between October 2006 and March 2007.

The ACS was designed to provide a picture of the early development of Aboriginal children and the social and living conditions in which they are learning and growing.

The focus of this analytical article is First Nations children living off reserve, Métis children, and Inuit children. It is based on information provided by parents or guardians of about 10,500 Aboriginal children under 6 years of age.

The ACS is a post-censal survey, that is, the sample was selected from children living in private households whose response on their 2006 Census questionnaire indicated that they: (1) had Aboriginal ancestors and/or; (2) identified as North American Indian and/or Métis and/or Inuit and/or; (3) had treaty or registered Indian status and/or; (4) had Band membership.

The Aboriginal identity definition is used in this report. For the ACS, children were identified by parents/guardians as North American Indian and/or Métis and/or Inuit. The term "First Nations children" is used throughout this report to refer to those children living off reserve who were identified as North American Indian.

It was possible to report both single and multiple responses to the Aboriginal identity question on the ACS (approximately 3% of children in the Aboriginal identity population of the ACS were identified with more than one group). In this article, data represent a combination of both the single and multiple Aboriginal identity populations. As an example, the Métis data tables include those who were

identified as Métis only and those identified as Métis in combination with another Aboriginal group (for example, Métis and North American Indian).

Where Census data is used in this article, the single response Aboriginal identity population is used. Less than 1% of Aboriginal children under the age of 6 were identified as belonging to more than one Aboriginal group on the 2006 Census.

More detailed information about the survey is available in the *ACS Concepts and Methods Guide* (catalogue no. 89-634-X 2008006).

Registered Indian status

Not every individual who identifies as a First Nations person is a treaty or registered Indian. According to the 2006 Census, 67% of children under the age of 6 years old living off reserve who were identified as First Nations children were also treaty or registered Indians (31,425 children). The remaining 33% were not treaty or registered Indians (15,680).

Registered Indians or "status Indians" are people who are entitled to have their names included on the Indian Register, an official list maintained by the federal government. Certain criteria determine who can be registered as a status Indian. Only registered Indians are recognized as Indians under the *Indian Act*, which defines an Indian as 'a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian.'

Status Indians are entitled to certain rights and benefits under the law. Generally speaking, treaty Indians are persons who are registered under the *Indian Act* and can prove descent from a band that signed a treaty. Differences in findings for these two groups are included throughout this article.

For more information, including the inheritance rules regarding the passing of registered Indian status from parents to children, see the Indian and Northern Affairs Canada website at: http://www.ainc-inac.gc.ca/pr/pub/wf/index_E.html

When the 2006 ACS asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," it was reported that children were most likely to receive focused attention at least

once a day from their mothers (93%), followed by siblings (69%), fathers (64%) and grandparents (27%). Most also received focused attention from their extended family at least once a week: 67% from grandparents, 55% from aunts and uncles, and 45% from cousins.

Daily life and community

The ACS asked parents/guardians to rate their feelings regarding five aspects of their home and daily life. The vast majority reported being "very satisfied" or "satisfied" with their social support network, main job or

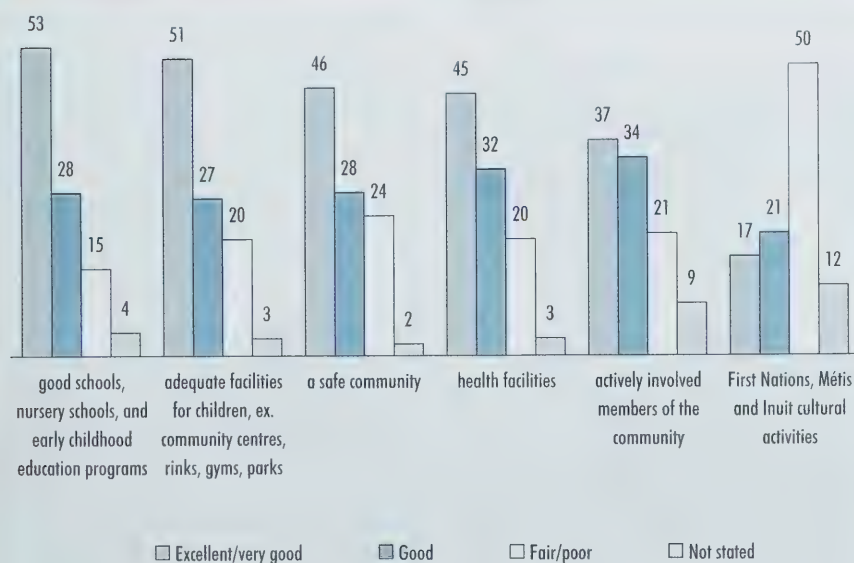
Table 1 Persons Involved in raising off-reserve First Nations children under age 6, 2006**First Nations children living off reserve**

	Total	With registered Indian status †	Without registered Indian status
		percentage	
Mother	93	93	94
Father	72	68	78*
Grandparents	44	45	43
Other relatives (aunt, uncle, cousin, sibling)	28	31	24*
Other ¹	17	16	18

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.¹ Includes child care provider/teacher, other relatives not already specified and non-relatives.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Chart 1 Percentage of off-reserve First Nations children whose parents/guardians rated their feelings about quality of life in their community

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

activity, and the way they spend their free time. They were least satisfied with their finances and housing.

Nearly half (49%) of off-reserve First Nations children under age 6 were in low-income families, compared with 18% of non-Aboriginal children.

Of these low-income First Nations children, 38% had parents/guardians who were "dissatisfied" or "very dissatisfied" with their finances. The proportion was 19% for those who were not in low-income families. Similarly, dissatisfaction with housing

was over twice as high for those living in low-income families than for those not in low-income families (22% versus 9%).

About half of off-reserve First Nations children lived in a community rated by their parent/guardians as "excellent" or "very good" in terms of schools, nursery schools and early childhood education programs (53%), adequate facilities for children (51%), as a safe community (46%) and a place with health facilities (45%) (Chart 1).

Many young First Nations children living off reserve are growing up in communities where Aboriginal people represent a small minority among a diversity of cultures. In many of these communities, it is likely more difficult to maintain ties to traditional Aboriginal cultures than in communities where Aboriginal people represent the majority of the population. In 2006, 17% of young First Nations children were living in a community rated as "excellent" or "very good" in terms of being a place with First Nations, Métis and Inuit cultural activities.

Almost half (46%) of young First Nations children living off-reserve had participated in or attended traditional First Nations, Métis, or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies. Just as many (45%) had taken part in hunting, fishing, trapping or camping. About 30% had also participated in traditional seasonal activities such as gathering goose eggs or wild plants, for example berries, sweet grass, roots or wild rice. Children in rural areas were more likely to have taken part in these traditional and cultural activities than children living in urban areas (Table 2).

In 2006, 45% of off-reserve First Nations children had someone who helped them to understand First Nations history and culture. This figure was higher for children with registered Indian status (54%) than for those without status (32%). Of those who had someone involved in helping them understand their history

Table 2 Participation of off-reserve First Nations children under age 6 in selected traditional activities, 2006

Type of traditional activities	First Nations children living off reserve who...		
	Total	Urban †	Rural
		percentage	
Participated in or attended traditional First Nations, Métis or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies	46	46	47
Took part in hunting, fishing, trapping or camping	45	41	58*
Participated in seasonal activities, such as gathering goose eggs or wild plants (for example, berries, sweet grass roots or wild rice)	30	26	40*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Table 3 Persons involved in raising Métis children under age 6, 2006

Relationship to the child	Métis children
	percentage
Mother	94
Father	78
Grandparents	41
Other relatives (aunt, uncle, cousin, sibling)	21
Other ¹	17

1. Includes child care provider/teacher, other relatives not already specified and non-relatives.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

or culture, 60% were being taught by their parents, 50% by grandparents, and 20% by aunts and uncles. About 14% of First Nations children living off reserve who had someone to help them understand their culture were also learning from their teachers or child care providers.

Métis children

Family

In 2006, the Census enumerated about 35,000 Métis children under the age of 6 in Canada. The majority (89%) of young Métis children were in the provinces of Alberta, Manitoba, Ontario, Saskatchewan

and British Columbia. A relatively large proportion of Métis children were growing up in rural areas, with 27% of young Métis children living in rural areas compared to 18% of non-Aboriginal children. Another 41% of Métis children were living in census metropolitan areas and the remaining 32% in smaller urban centres.

About one-third (32%) of young Métis children were living in families with three or more children, compared to 25% of non-Aboriginal children. (When considering families with four or more children, the percentages are more similar, at 11% for young Métis and 8% for non-Aboriginal children.)

A larger proportion of Métis children in rural areas (39%) were living in families with three or more children, compared to Métis children in urban areas (30%).

According to the 2006 Census, 67% of Métis children were living with two parents, 30% were in lone parent households, 7% were in multiple-generation households (children, parents and grandparents) and 1% were living with their grandparents only. Living in lone parent households was more common among children in urban (33%) than rural communities (22%).

In the 2006 ACS, the parents/guardians of most Métis children (91%) reported that many people were involved in raising the child. Mothers were most often involved (94%) followed by fathers (78%) and grandparents (41%). About one-fifth (21%) of Métis children had relatives (such as siblings, cousins, aunts and uncles) who were playing a part in raising them (Table 3).

When asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," parents/guardians reported that Métis children were most likely to receive focused attention at least once a day from their mothers (94%), followed by fathers (71%), siblings (70%) and grandparents (24%). At least once a week, 69% of Métis children received focused attention from grandparents, 51% from aunts and uncles and 40% from cousins.

Daily life and community

Parents/guardians were asked to rate their feelings regarding five aspects of their home and daily life — housing conditions, support network, main job or activity, free time, and finances. Most Métis children (93%) had parents/guardians who reported relatively high levels of satisfaction with the informal social supports available from family, friends and others. They most often gave the lowest ratings of satisfaction to "finances."

Almost one-third (31%) of Métis children under age 6 were living in low-income families, compared with 18% of non-Aboriginal children. The percentage of Métis children in low-income families was higher in urban than rural areas, at 36% compared to 20%.

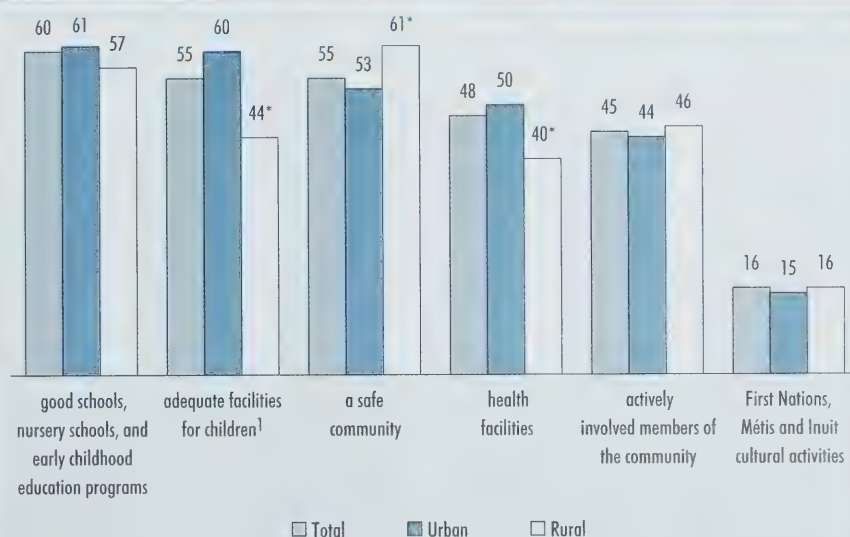
About 36% of Métis children living in low-income families had parents/guardians who reported that they were "dissatisfied" or "very dissatisfied" with their finances. The proportion was 15% for those who were not in low-income families. Those living in low-income families were also three times as likely to be "dissatisfied" or "very dissatisfied" with their housing situation, at 19% compared to 6%.

Research indicates that children's well-being may be linked to neighbourhood "quality".⁴ The majority of Métis children lived in a community that their parents/guardians rated as "excellent" or "very good" in terms of good schools, nursery schools and early childhood education programs (60%), adequate facilities for children (55%) and being a safe community (55%). By comparison, 16% of young Métis children were living in a community rated as "excellent" or "very good" in terms of Aboriginal cultural activities (Chart 2).

In 2006, 28% of young Métis children under age 6 had participated in or attended traditional First Nations, Métis, or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies. More than half (53%) had taken part in hunting, fishing, trapping or camping. About 30% of Métis children had participated in traditional seasonal activities such as gathering goose eggs or wild plants, for example berries, sweet grass, roots or wild rice. Children living in rural areas were more likely to have taken part in these types of activities than children living in urban areas (Table 4).

In 2006, 31% of Métis children had someone who helped them to understand Aboriginal history and culture. Of these children, most

CST Chart 2 Percentage of Métis children under age 6 with parents/guardians who feel their community is excellent or very good



1. For example, community centres, rinks, gyms, parks.

* Statistically significant difference from "Urban areas" at $p < 0.05$.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

CST Table 4 Participation of Métis children under age 6 in selected traditional activities, 2006

Type of traditional activities	Métis children who have...		
	Total	Urban areas †	Rural areas
	percentage		
Participated in or attended traditional First Nations, Métis or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies	28	27	30
Taken part in hunting, fishing, trapping or camping	53	50	63*
Participated in seasonal activities, such as gathering goose eggs or wild plants (for example, berries, sweet grass roots or wild rice)	30	26	40*

† Reference group
 * Statistically significant difference from reference group at $p < 0.05$.
 Source: Statistics Canada, Aboriginal Children's Survey, 2006.

were being taught by close family members – their parents (56%) and grandparents (46%), as well as aunts and uncles (13%). About 14% were learning from their teachers or child care providers.

Inuit children Family

In 2006, the Census enumerated about 7,000 Inuit children under the age of 6 years in Canada. The

majority (84%) lived in one of the four regions that comprise Inuit Nunaat, which means "Inuit homeland" in the Inuit language. The remaining 16% of children lived outside Inuit Nunaat, 13% in urban areas and 3% in rural areas.

The size of many Inuit families remains larger than other families across the country. For example, in 2006, 28% of young Inuit children were living in families with four or more children. The percentage was 31% in Inuit Nunaat, where the majority of Inuit children live. This is compared to 8% of non-Aboriginal children in the same age group across Canada.

In 2006, the majority of Inuit children (70%) were living with two parents, 28% with lone parents, 16% in multiple-generation households (children, parents and grandparents), and 1% with grandparents only.

The parent or guardian responded to the ACS. For the majority of Inuit children, this person was the birth mother or father (79%). Grandparents (4%) and adoptive parents (12%) made up the majority of the remaining parents or guardians. The proportion of adoptive mothers and fathers who responded to the ACS was significantly higher than that for the Métis and First Nations children living off reserve. Historically, adoption has been a common practice in Inuit society and continues to be widespread.

While members of the immediate family are primarily responsible for the upbringing of Inuit children, in many cases it is also a responsibility shared by many others in the community.⁵

In 2006, the parents/guardians of 91% of Inuit children reported that many people were involved in raising the child. Mothers were most commonly reported as being involved (92%) followed by fathers (77%). Grandparents (46%) and other relatives (47%) were also reported to be playing a part in raising the child (Table 5).



Table 5 Persons involved in raising Inuit children under age 6, 2006

Relationship to the child	Inuit children percentage
Mother	92
Father	77
Grandparents	46
Other relatives (aunt, uncle, cousin, sibling)	47
Other ¹	19

1. Includes child care provider/teacher, other relatives not already specified and non-relatives.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

When asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," it was reported that mothers were most likely to give focused attention to the child at least once a day (92%), followed by fathers (73%), siblings (73%) and grandparents (43%). At least once a week, 71% of Inuit children received attention from grandparents, 72% from aunts and uncles, and 69% from cousins.

Daily life and community

On the ACS, parents/guardians were asked to rate their feelings regarding five aspects of their home and daily life. Of these five categories -- housing conditions, support network, main job or activity, free time, and finances -- parents/guardians of young Inuit children gave the lowest ratings of satisfaction to housing and finances. Levels of dissatisfaction with finances and housing were similar across the four regions of Inuit Nunaat.

Dissatisfaction with housing is likely a reflection of the relatively poor housing conditions of some Inuit. According to the 2006 Census, 29% of Inuit children under 6 years lived in homes in need of major repairs compared to 8% of non-Aboriginal children; 43% of Inuit children were also living in crowded dwellings, compared to 7% of non-Aboriginal children.

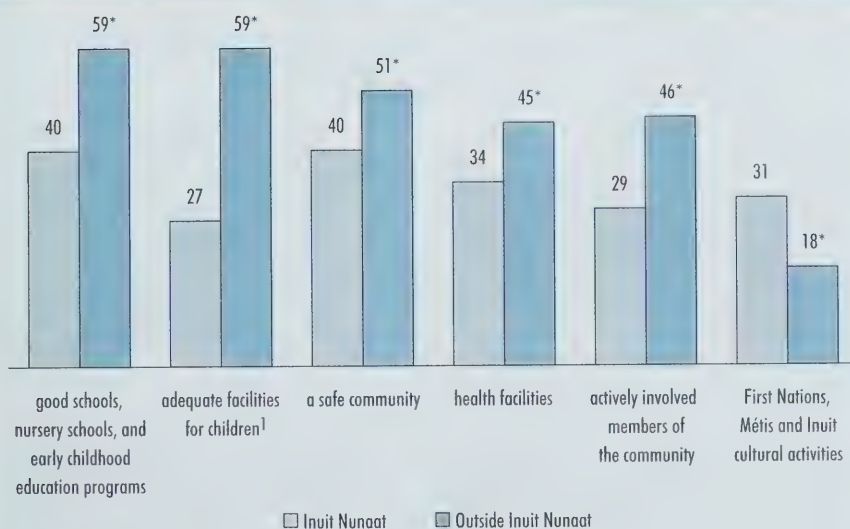
Parents/guardians of Inuit children were asked to rate their feelings about their community on the basis of six characteristics. Inuit children who lived in Inuit Nunaat had parents/guardians who were less likely to report that their community was "excellent" or "very good" in terms of five characteristics, compared to those living outside Inuit Nunaat. For example, while 27% of Inuit children within Inuit Nunaat had parents/guardians who rated their community as "excellent" or "very good" in terms of adequate facilities for children (such as community centres, rinks, gyms, and parks), 59% of those living outside Inuit Nunaat had parents/guardians who did so (Chart 3).

In 2006, about 63% of Inuit children under the age of 6 living in Inuit Nunaat had participated in or attended traditional Inuit activities such as singing, drum dancing, gatherings or ceremonies; and 58% had taken part in hunting, fishing, trapping or camping. Children living in Inuit Nunaat were more likely to participate in these activities than those living outside Inuit Nunaat (Table 6).

In 2006, 60% of Inuit children living in Inuit Nunaat compared to 33% living outside Inuit Nunaat had participated in traditional seasonal activities such as gathering goose eggs or berries.

In all regions across Inuit Nunaat, about six in ten Inuit children had

Chart 3 Percentage of Inuit children under age 6 with parents/guardians who report their community is "excellent" or "very good"



1. For example, community centres, rinks, gyms, parks.

* Statistically significant difference from Inuit Nunaat at $p < 0.05$.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Table 6 Participation of Inuit children under age 6 in selected traditional activities, 2006

Type of traditional activities	Inuit children who have...	
	Inuit Nunaat †	Outside Inuit Nunaat
	percentage	
Participated in or attended traditional First Nations, Métis or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies	63	36*
Taken part in hunting, fishing, trapping or camping	58	45*
Participated in seasonal activities, such as gathering goose eggs or wild plants (for example, berries, sweet grass roots or wild rice)	60	33*

† Reference group.

* Statistically significant difference from reference group at $p < 0.05$.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

taken part in traditional activities such as singing, drum dancing or gatherings and hunting, fishing, trapping or camping. Participation in traditional seasonal activities like gathering eggs and berries was more common among Inuit children

in Nunatsiavut (74%) and Nunavik (66%) than in Nunavut (57%) and the Inuvialuit region (55%).

In 2006, about two-thirds of Inuit children had someone who helped them to understand their Inuit culture and history (65%). Of those who had

someone involved in helping them understand Inuit history and culture, most were being taught by their parents (76%) and grand-parents (60%).

Summary

Compared to non-Aboriginal children, young Aboriginal children were more likely to be growing up in large families. Many persons, including extended family and community members, were involved in raising young Aboriginal children. More than two-thirds of First Nations children living off reserve, of Métis and of Inuit children under 6 received focused attention from their grandparents at least once a week. Furthermore, between one-quarter and one-third received focused attention from Elders at least once a week.

In general, parents/guardians reported relatively high levels of satisfaction with their support networks from family, friends and others. The parents/guardians of at least 9 in 10 First Nations, Métis and Inuit children reported that they were "very satisfied" or "satisfied" with the social supports available from family, friends and others.

Many parents/guardians of Aboriginal children reported dissatisfaction with their finances. Parents/guardians of 29% of Inuit children and 28% of First Nations children living off reserve were "dissatisfied" or "very dissatisfied" with their finances. Among Métis children, the proportion was 21%.

Although parents/guardians of off-reserve First Nations and Métis children were generally satisfied with many aspects of their community as a place to raise children, they were less satisfied with access to activities and services that promote traditional and cultural values and customs. In 2006, parents/guardians of 17% of off-reserve First Nations children and 16% of Métis children rated their community as "excellent" or "very good" in terms of access to Aboriginal cultural activities.

Inuit children appear to have more access to cultural activities than their First Nations and Métis counterparts. About one-third (31%) of those within Inuit Nunaat had parents/guardians who rated their community as "excellent" or "very good" as a place with cultural activities.

The Aboriginal Children's Survey is a rich source of data with great potential for further research into these issues. For example, there are indicators of community and cultural strength and resilience that could be further explored. Further research using the ACS data could also help to build understanding of how culture is being transmitted inter-generationally to these young Aboriginal children, and how exposure to cultural and

traditional values and practices affect developmental and behavioural outcomes.



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1. In total, the 2006 Census enumerated 131,000 Aboriginal children under the age of 6 – about 40,000 lived on reserve and 91,000 lived off reserve. (A reserve is land set apart and designated for the use and occupancy of an Indian group or band – as such, the terms "on-reserve" or "off-reserve" are generally not applicable to Métis or Inuit.) Census counts have been used to describe the number of Inuit, Métis and off-reserve First Nations children rather than the counts stemming from the Aboriginal Children's Survey

(ACS) for consistency with previously released Census data. Please refer the ACS *Concepts and Methods Guide* for a detailed explanation of the relationship between the ACS and the Census (catalogue no. 89-634-X).

2. All First Nations children living in the territories were included.
3. Urban areas have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-CMAs.
4. Curtis, Lori J. et. al. (2004.) Child well-being and neighbourhood quality: evidence from the Canadian National Longitudinal Survey of Children and Youth. *Social Science and Medicine*, 58:1917-1927.
5. Nunavut Arctic College. "Interviewing Inuit Elders: Childrearing Practices" <http://www.nac.nu.ca/OnlineBookSite/vol3/introduction.html>



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